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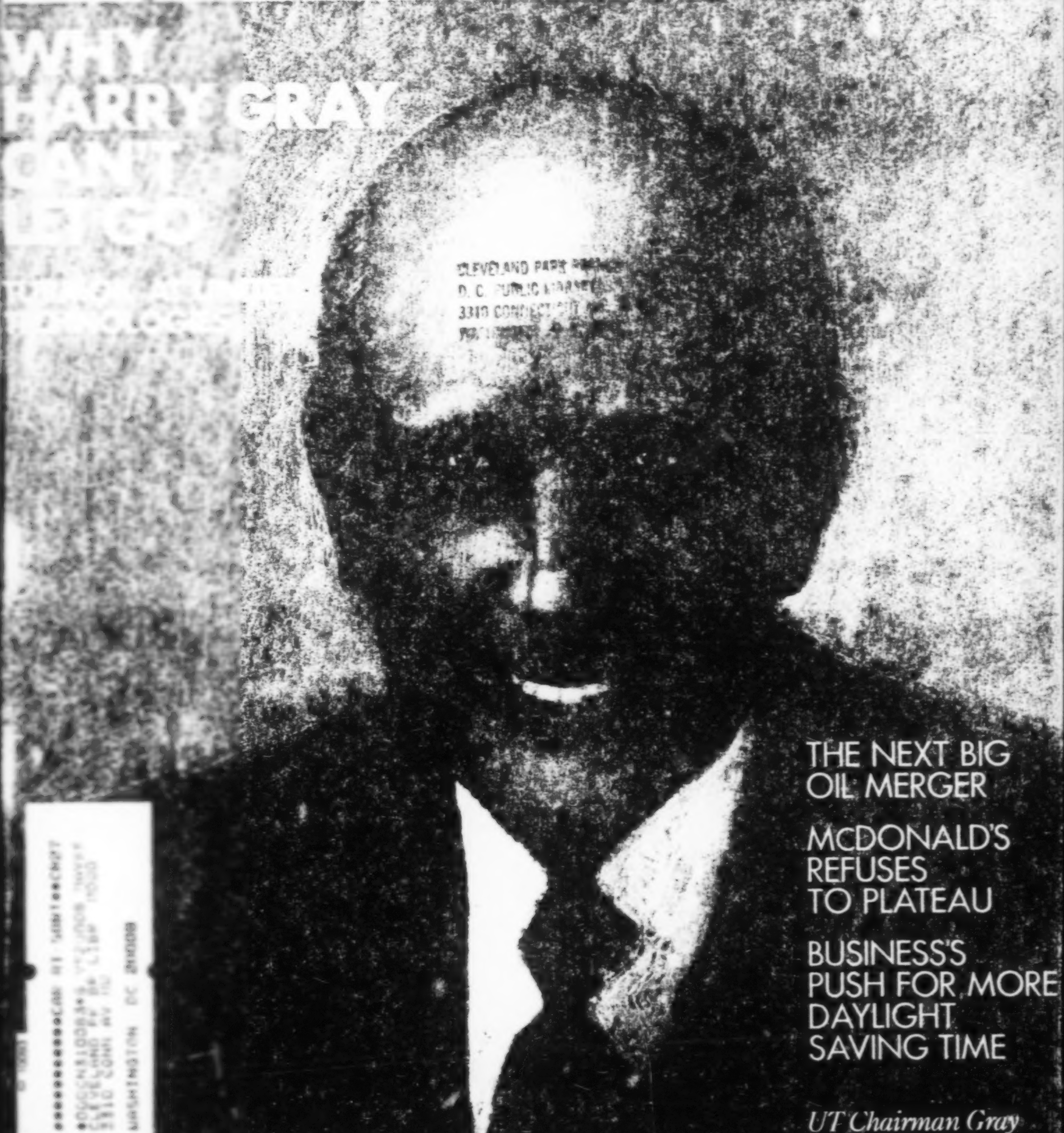

WHY HARRY GRAY CAN'T LET GO

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THE NEXT BIG OIL MERGER

McDONALD'S REFUSES TO PLATEAU

BUSINESS'S PUSH FOR MORE DAYLIGHT SAVING TIME

UT Chairman Gray

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NOVEMBER 12, 1984
VOL. 110, NO. 10
FORTUNE

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Harry Gray—painted for the cover in acrylics and oil by Gregory Spalinka—has an uncommon determination to keep his hands on the reins. See page 16.

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MANUFACTURERS HANOVER FEELS A STING IN PARIS

For nearly a decade a likable banker in its French subsidiary collected wads of cash from investors who expected super-high yields. Now the banker is in jail and the money has vanished.

Banker Louis Abollivier *as he was pictured in the MHBN 1976 annual report*

TALL, pear-shaped, and affable, Parisian banker Louis Abollivier inspired a cuddly confidence in customers and friends that earned him the nickname *Nounours*, French for teddy bear. When he told well-heeled acquaintances in Paris and the Caribbean that he could get them tax-free returns of 20%, they flocked to partake. His job as a vice president of Manufacturers Hanover Banque Nordique, a Paris-based subsidiary controlled by America's fourth-largest bank, didn't hurt his credibility. Some investors strolled into MHBN headquarters for over a decade, handing Abollivier envelopes, rolled-up newspapers, and briefcases stuffed with cash. One woman brought more than $200,000 in small bills.

But like many dream investments, this one was too good to be true. Last March MHBN said that no such accounts existed. Abollivier, 48, swallowed a handful of barbiturates in a suicide attempt. Investors might have felt like following suit: several lost more than half a million each, and estimates of the total fleecing range from the equivalent of a few million dollars to $20 million.

Now in jail near Paris awaiting trial on criminal charges, Abollivier says he acted alone. Even so, publicity expected to surround the December trial will embarrass MHBN, which at the least will have to explain how the scam could go on so many years. Manufacturers Hanover of the U.S. hardly needs controversy from this small corner of its realm while battling investors' perceptions that its huge Latin loans have seriously undermined its strength.

Abollivier's angry investors are claiming that MHBN must reimburse them. The bank is a handy target because Abollivier claims the mountain of money is gone, every franc frittered away in a classic Ponzi scheme. He says he paid hefty returns to early investors with money collected from later ones.

MHBN says it is blameless. In the hours after the scam unraveled, Abollivier's colleagues at MHBN demanded a written statement exonerating the bank. Minutes before the police arrived, he wrote that he was merely holding money for friends from the French Caribbean island of Guadeloupe. In June a judge refused a request from the victims for a judgment without trial against the bank; he said the scheme should have stoked suspicions in any investor. Once the trial starts, though, the bank will face some of Paris's most prestigious lawyers, hired by about 70 victims.

A relative latecomer to the crowded French credit market, Manufacturers Hanover in 1972 purchased 60% of Banque Nordique, a joint venture of four Scandinavian banks lured to Paris in the late 1960s to serve such global customers as Saab and Volvo. The minority partners represent each Scandinavian country: Svenska Handelsbanken of Sweden, Den norske Creditbank of Norway, Kansallis-Osake-Pankki of Finland, and Copenhagen Handelsbank of Denmark. With modest assets of $885 million, Manufacturers Hanover Banque Nordique caters mostly to corporate customers, making the scam all the more surprising.

Abollivier joined MHBN in 1973 as head of real estate lending. For more than a decade he quietly managed a portfolio of $5 million to $10 million in construction loans. It was hardly a lofty job, but a taste for the good life gave him a false aura of having family money. Despite his salary of less than $30,000 a year, he lavishly entertained investors at one of France's most celebrated restaurants, Les Trois Marches in Versailles. He and his wife owned a chic apartment near the Eiffel Tower, a country house outside Chartres, and vacation villas on the Côte d'Azur and the island of Saint Bart's. Abollivier recruited most of his investors on frequent trips to the French West Indies. He apparently created the impression that MHBN used the clients' money for lucrative currency trading that would yield the promised returns. They received no periodic account statements. Abollivier simply scribbled his signature and an account number on an MHBN deposit slip, applied a bogus stamp, and handed the client a duplicate.

The bank brought about Abollivier's undoing unwittingly. In 1981 MHBN decided to phase out construction lending. Under pressure to leave, Abollivier handed in his resignation late last year, effective on March 31, 1984. He faced a prickly problem. If he failed to pay off investors before leaving MHBN, they would soon approach the bank directly and discover the scam. His solution was to find a job at another bank where he could ostensibly transfer the phony accounts. But no job materialized. When an investor with a fistful of deposit slips tried to withdraw more than $300,000 from dumbfounded officers at MHBN, the game was over. **—Shawn Tully**

FRONTIER INVESTING

Wanna buy Chilean stocks? A World Bank affiliate will help.

WHEN THE Korea Fund was launched last August, few people noticed that one of the lead underwriters was a new player in Wall Street's game—the International Finance Corp., an affiliate of the World Bank. With such old-timers as First Boston and Lehman Brothers, the IFC co-managed the

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$60-million public offering, which gave U.S. investors their first chance to buy Korean stocks without a lot of red tape. The IFC seems to be in the underwriting game to stay: it plans to underwrite two similar funds next year.

The Korean deal meets two prime IFC objectives reflected in its 1956 charter: to help the economies of the developing world and to make money. The corporation made $600,000 by underwriting the Korea Fund and selling shares outside the U.S. The IFC is backed by the U.S. and some 125 other shareholder nations, which earned $26 million on $774 million of shareholders' equity in the last fiscal year.

Wall Street likes having the IFC as a partner because the international body can help open foreign markets to outside investors. Many nations discourage foreign stock ownership and set up bureaucratic mazes that hinder investment. The IFC's Capital Markets Department, which has good relations with finance officials in developing countries, can help smooth the way. Says Capital Markets director David Gill, 58, "Developing countries are beginning to realize foreign investment is a two-way street." Instead of viewing outside capital as a threat to local control, some recognize it is a way to raise more money and import financial expertise.

With a taste of success from the Korea Fund—shares were recently trading 18% above their $12 offering price—Capital Markets has been intensively studying the stock markets of other countries. The IFC is looking for those that are big and liquid enough to absorb foreign capital without sending prices sky high. Some likely candidates: Brazil (where listed stocks were worth $13 billion at the end of 1983) and India ($8.5 billion). While stock markets in the less developed world are volatile, IFC research (see table) reveals that many have had excellent returns, even after conversion to U.S. dollars.

To channel investment into small, tricky stock markets, the IFC is talking about teaming up with Templeton Investment Counsel, an organization affiliated with Bahamian-based John Templeton, 71, whose investment record is among the best in the business. Some markets that might be represented in a fund co-sponsored by Templeton Investment and the IFC are Jordan, Chile, and Argentina. The idea is that trading in each of these markets is too thin to support a one-country fund, but that a pooled fund could represent a sensible risk.

LESS DEVELOPED STOCK MARKETS
1976-83 TOTAL RETURN TO INVESTORS

	AVERAGE ANNUAL RETURN	BEST YEAR	WORST YEAR
Chile	+27.7%	1977 +146.3	1982 −52.1
S. Korea	+21.5%	1977 +114.2	1980 −26.5
India	+20.4%	1978 +51.2	1982 −5.1
Argentina	+18.7%	1979 +233.6	1980 −72.2
Jordan*	+18.7%	1978 +53.4	1983 +6.5
Brazil	+16.7%	1983 +239.3	1979 −12.5
Thailand	+14.6%	1977 +187.7	1979 −40.7
Zimbabwe	+0.8%	1979 +178.7	1981 −56.7
Mexico	−0.6%	1983 +170.2	1982 −79.8
Greece	−5.1%	1977 +33.6	1983 −36.9

*1978-1983. SOURCE: IFC

Third World Capitalism

From 1976 through 1983, when Standard & Poor's index of 500 U.S. stocks rose at an annual rate of 7.9%, many stock markets in the less developed world did better. But the smaller markets are roller coasters. (Returns were calculated after conversion to U.S. dollars.)

Sometimes the markets' volatile results seem to defy logic. For example, despite the two countries' troubles, Argentina's stock market rose 125% in 1983 and Brazil's a thundering 239%—again, measured after converting to dollars. Templeton's explanation: inflation forced Latins to look for ways to get out of currency, sending a flood of money into stocks.

The IFC is also working with experts who channel seed capital into new enterprises. With TA Associates, a Boston venture firm, and Orange-Nassau, a Dutch holding company, Capital Markets has just set up a $40-million venture capital project for Southeast Asia. The fund has already invested in a company that processes clay in Malaysia and an electronics manufacturer in Singapore, and is evaluating a word-processing system for Chinese characters. Companies such as Monsanto, American Can, and First National Bank of Boston have invested in the fund to get access to new ideas and products in one of the most rapidly growing corners of the globe.

—Brian Dumaine

NOVEMBER 26, 1984

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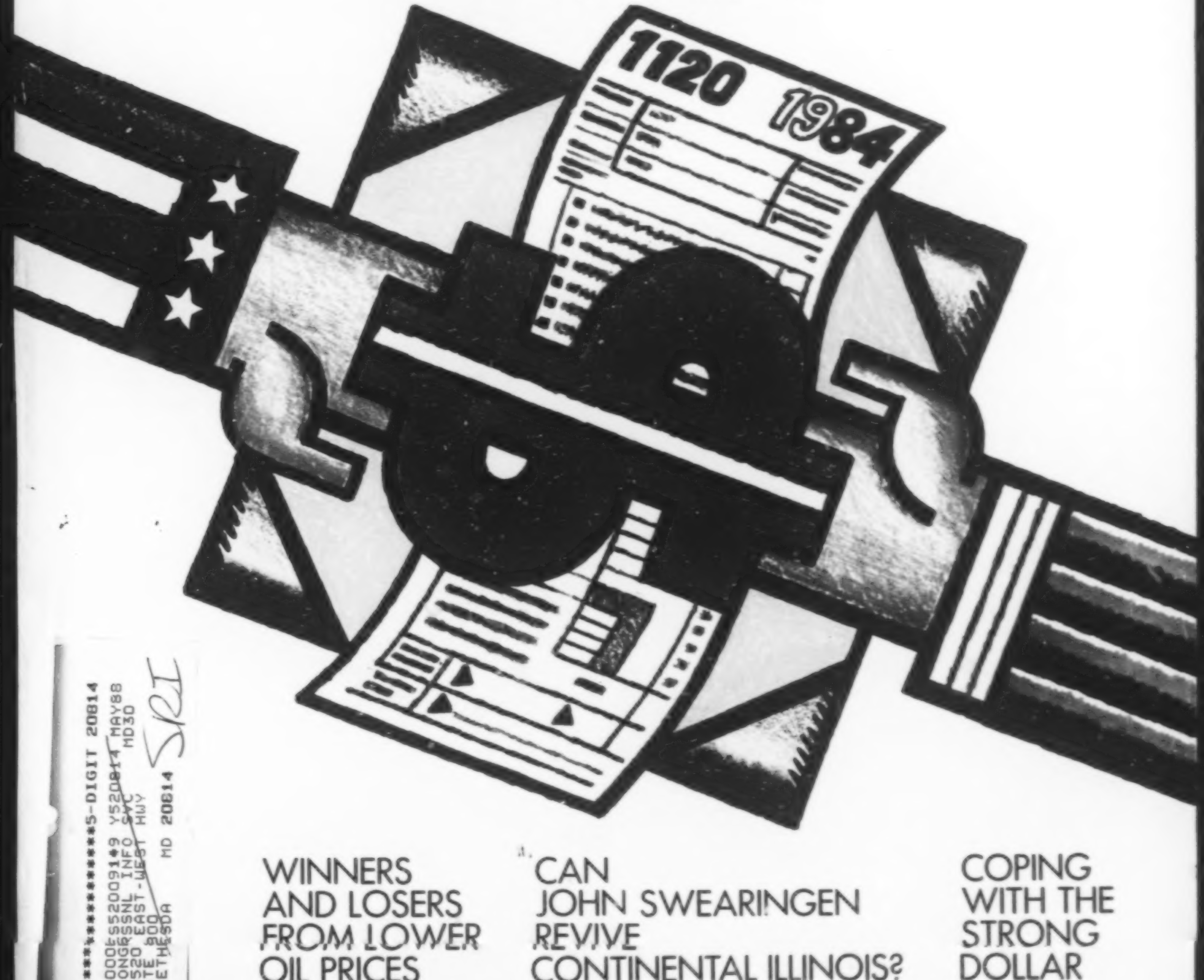
FORTUNE

SPECIAL REPORT

THE COMING TAX INCREASE

WHO'S ON THE HIT LIST



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WINNERS AND LOSERS FROM LOWER OIL PRICES

CAN JOHN SWEARINGEN REVIVE CONTINENTAL ILLINOIS?

COPING WITH THE STRONG DOLLAR

NOVEMBER 26, 1984 VOL. 110, NO. 11

FORTUNE

SAAB 9000
Corporate Performance

FORTUNE
THE COMING TAX INCREASE

Bob Gale's cover drawing symbolizes the tugging and hauling over taxes that lies just ahead. See page 29.

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by broadening the tax base—and business will be the prime target. The feeling on Capitol Hill that corporations are not paying their fair share has been sharpened by eye-catching reports revealing how little in taxes many big companies pay (see box at right). The average effective corporate tax rate fell from almost 22% in 1980 to about 16% in 1982. By 1983 the corporate tax was contributing only 6 cents out of every dollar paid to the Treasury, down from 12.5 cents in 1980.

The major cause of this dramatic drop-off—leaving aside the recession—has been the liberalized depreciation system and investment tax credit that Congress enacted in 1981. In 1982 and again this year, Congress scaled back those capital investment incentives. But many congressional tax writers think the breaks are still too generous. The Library of Congress's Congressional Research Service estimates that for short-lived assets, like cars and machinery, the combined effect of the investment credit and accelerated depreciation can exceed even the benefits of expensing—writing off the full cost in the year in which the investment is made. Says Ways and Means tax counsel Leonard: "The system clearly provides a corporate subsidy. And that bothers many members of Congress."

Congress remains unconvinced by arguments like lobbyist Walker's that the 1981 tax cuts helped fuel "the strongest boom in business investment since 1949." The tax writers' emerging hit list includes:

▶ **CAPITAL COST RECOVERY.** The 10% investment credit, which individuals and companies can take on equipment from giant machine tools to home computers, is a prime target. The Administration predicts that in 1985 the investment credit will keep about $30 billion in potential tax revenues out of the Treasury's grasp—a calculation that does not, however, take into account any new taxable revenues generated by the protected investments. Congress won't repeal the credit outright, but could cut it back. Tax writers might also tighten up a bit more on depreciation. Hardest hit will be those profitable capital-intensive firms—like Exxon, General Motors, and General Electric—that now make heavy use of depreciation allowances and the investment credit.

▶ **SPECIAL BUSINESS BREAKS.** Congress may also take away a number of specialized tax incentives. Particularly vulnerable is the 25% credit for increased research and development spending. Congress enacted it in 1981, but it is scheduled to expire at the end of 1985. This year Congress refused to make the credit permanent, despite lobbying by high-tech firms, including IBM, Control Data, and Hewlett-Packard. Those compa-

A TAX STUDY BUSINESS DOESN'T LIKE

■ It was enough to give a business lobbyist heartburn. A labor-supported organization called Citizens for Tax Justice brought out and widely distributed in Washington a report that has whetted Congress's appetite for new tax revenues from business. The title: *Corporate Income Taxes in the Reagan Years: A Study of Three Years of Legalized Corporate Tax Avoidance*. For its study, Citizens for Tax Justice looked at 250 profitable American companies. It calculated that 128 of them paid no federal income taxes or "made money"—got refunds or other tax benefits—in at least one of the three years since passage of the Reagan tax bill. In that time the 250 companies earned profits in the U.S. of some $57 billion.

The numbers in the study are no secret; Citizens for Tax Justice derived them from the companies' own annual reports, where tax transactions appear in the financial notes. But companies routinely (and legally) keep one set of books for the tax man and another for shareholders. For tax purposes, businesses take every break the law allows, including accelerated depreciation and investment tax credits—anything to reduce taxable income. In reports to stockholders, the emphasis goes on showing large profits by such means as stretching out depreciation. The study (see table) is based on profits as reported to shareholders and the taxes paid or tax benefits received by the companies.

Corporate tax officers queried by FORTUNE point out that the years used in the study included a wrenching recession, which crippled profits and reduced or eliminated tax obligations for many companies. They also point out that the business tax breaks in the 1981 tax bill boosted capital investment and created jobs (see page 53). When a corporation takes accelerated depreciation or other tax benefits to reduce income for tax purposes, the difference between taxes paid and the taxes that would have been due on income reported to shareholders is carried as a deferred obligation. Corporate tax directors say that Citizens for Tax Justice distorts the picture by ignoring deferred taxes. Yet any growing business will keep generating new and even larger deferrals. In some cases these deferrals become outright exemptions. In the 1984 tax act, Congress forgave about $11 billion in deferred taxes accumulated through domestic international sales corporations by Boeing, General Electric, and thousands of other U.S. exporters. —Craig C. Carter

MAJOR AMERICAN COMPANIES PAYING ZERO OR LESS IN FEDERAL INCOME TAX, 1981–83

COMPANY	PROFITS in millions	FEDERAL INCOME TAX in millions	TAX RATE
General Electric	$6,527.0	–$283.0	–4.3%
Boeing	$1,530.0	–$267.0	–17.5%
Lockheed	$1,085.0	$0	0%
General Dynamics	$930.8	–$70.6	–7.6%
Columbia Gas System	$886.7	–$94.6	–10.7%
Dow Chemical	$776.0	–$223.0	–28.7%
Transamerica	$584.9	–$86.4	–14.8%
Grumman	$474.5	$0	0%
American Financial	$426.9	–$1.9	–0.4%
Mitchell Energy & Development	$402.8	–$41.1	–10.2%
Greyhound	$290.8	–$42.1	–14.5%
Centex	$194.2	–$11.7	–6.0%
Champion International	$167.0	–$7.8	–4.7%
Singer	$104.6	–$12.5	–12.0%
U.S. Home	$54.3	–$53.6	–98.7%
TOTALS	$14,435.5	–$1,195.3	

Source: Citizens for Tax Justice

MANAGING

HOW COMPANIES ARE COPING WITH THE STRONG DOLLAR

More and more U.S. corporations have stopped waiting for the dollar to weaken and started to change how they do business—moving production offshore, selling trucks for sugar. The trick is to make changes that are reversible, in case the dollar fails.

■ *by Carol J. Loomis*

THE SEEMINGLY indomitable U.S. dollar, a phenomenon punishing American companies, is drastically reshaping the way that many think about their businesses. Up to now, says Lawrence A. Fox, a vice president of the National Association of Manufacturers, a lot of companies took the view that they could "ride this thing out." The dollar, they thought, would surely decline in value against other currencies, validating countless forecasts that it must. "But now," says Fox, "there is a growing feeling that Newtonian physics don't apply to exchange rates and that what goes up doesn't necessarily come down."

The companies harassed by that suspicion include three kinds of victims: U.S. multinationals get clipped with currency translation losses—a strengthening dollar deflates the profits they earn on foreign operations and reduces the value of their foreign assets. U.S. exporters find that their products cost customers overseas progressively more compared with the offerings of foreign manufacturers. U.S. manufacturers facing competition from imports find that those imports look less and less expensive to American customers. Since late 1980, when the dollar began steamrolling upward, a good many companies in its path have taken evasive action. Exporter Caterpillar Tractor, for example, has drastically cut costs and reshaped operations—though it still has losses.

The change now is that a much broader range of companies are rethinking their options, trying to develop strategies for coping with a strong dollar. Most are trying to stay flexible to avoid being whipsawed if the dollar changes course. After all, a contrarian would say the "growing feeling" that the dollar is invincible is a sure sign that it will promptly fall. The dollar was in fact looking somewhat less vigorous in early November.

RESEARCH ASSOCIATE *Rachael Grossman*

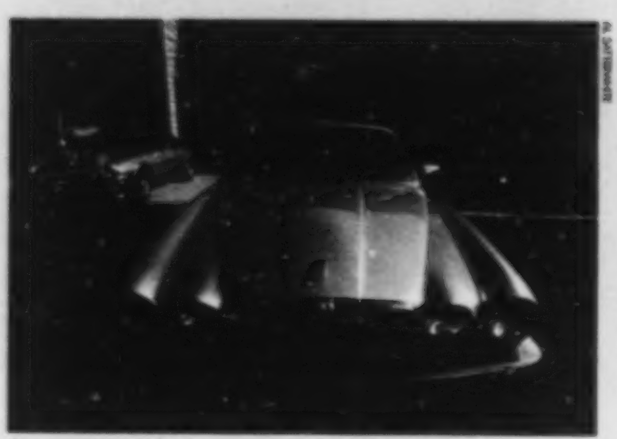
Given a strong dollar, U.S. multinationals are stuck with the problem of translating weak currencies into greenbacks. When the West German mark is worth about 32 cents, as it was recently, a profit of DM 100 million translates into only $32 million, not the $55 million it came to in 1980. Similarly, when the British pound declines in value from $1.40 to $1.22, as it did this year, a U.S. company with net assets of $140 million in Britain loses $18 million of value.

The losses on assets have relatively minor effects. First of all, they are bookkeeping charges only, devoid of cash flow consequences unless the company chooses to liquidate the investment. Second, many of these balance sheet losses don't even affect reported profits. Using one accounting approach, for example, companies need recognize only losses on monetary assets, not fixed assets. Furthermore, a multinational can entirely eliminate its exposure to these losses in a given country by balancing its monetary assets there with liabilities, such as debt payable in local currency. If the assets shrink in value because of a strengthening dollar, the liabilities will in effect shrink also because they can be paid in units of currency that are weakening against the dollar. By loading itself up with more liabilities abroad than it has monetary assets, a U.S. multinational can actually realize currency *gains* when the dollar strengthens. Rohm & Haas, the chemical manufacturer, has been doing just that.

A lot of companies, however, worry less about hedging their balance sheets these days because of a new accounting dictum, Financial Accounting Standard (or FAS) 52. Handed down in 1981, it allows many corporations to apply most gains and losses on balance sheet items directly to their stockholders' equity accounts, skipping the profit and loss statement entirely. In the equity account, these charges are called "currency adjustments," and they almost certainly go unnoticed by most shareholders. Dismissing such adjustments isn't entirely rational, though: a loss in value is a loss in value no matter where it is reported.

In the short life of FAS 52, which has known no dollar but a strong one, a good many companies have adjusted stockholders' equity for big currency losses (see table, page 119). At the end of 1983, IBM reported a cumulative currency loss for all previous years of about $2 billion, a charge that reduced stockholders' equity from $25 billion to $23 billion. But because retained earnings increased in 1983 by more than the $763-million currency loss for that year, IBM's equity still rose from 1982 to 1983. At other major companies—McGraw-Edison, an electrical equipment manufacturer, is one—a combination of small additions to retained earnings and large subtractions due to currency adjustments have caused stockholders' equity actually to decline year to year, highly unusual for corporations ostensibly making money and gaining in wealth. Perversely, a currency

THE MUSCULAR DOLLAR HAS PLENTY OF FANS ABROAD



Jaguar turned a loss *into a fat profit thanks to the dollar.*

■ While U.S. multinationals bewail the strong dollar, their counterparts abroad are cheering it on. Says Takeo Miki, a general manager of the Industrial Bank of Japan, "When the yen is weak and the dollar is strong, Japanese companies in the export business are very happy." Eberhard von Kuenheim, chairman of the German automaker BMW, says wryly, "We are not exactly suffering from the strong dollar."

Compared with a few years ago, a dollar of sales is worth roughly double the amount today in marks, francs, lire, pounds, guilders, or kronor, and about 10% more in yen. European companies that don't sell goods in America but compete with U.S. companies in other markets get a boost too, because the strong dollar weakens the Americans' competitiveness. Companies that don't export much—insurance brokers and retailers come to mind—can prosper if they have a source of dollar earnings. BAT Industries, the British group that has diversified out of tobacco and owns Saks Fifth Avenue and Gimbels, among other U.S. retail operations, is a conspicuous example. James Capel, a London stockbroker, estimates that 66% of BAT's pretax profits this year will come from America, thanks partly to the strong dollar.

One strategic decision non-U.S. companies have to make is what to do with their dollar bonuses. They can cut dollar prices to gain market share; they can hold prices but build more value into the product; they can simply pocket the money or use it for more R&D and capital investment back home. The trick is to pick the option that can, if possible, provide a lasting benefit if the dollar eventually sags.

Capital goods manufacturers have been quick to grab a price edge. Fiat's robot-making subsidiary, Comau, last spring won a big order for a welding system from General Motors, partly because of keenly competitive pricing. Airbus Industrie, Europe's challenger to Boeing's dominance, was able to use a sharp pencil in pricing the 28 planes it recently sold to Pan Am. "The dollar allows Airbus to hang in there," says a Boeing man. John Frantz, of the Boston Consulting Group, thinks one good way companies can use their dollar price advantage is to carve out market share against American competitors in third markets. The big West German chemical companies have followed just such a strategy to get a jump on U.S. competitors in commodity chemicals.

Carmakers, both in Europe and Japan, have kept their dollar prices up, sometimes even raising them. The Europeans are big in the luxury car market, which is fairly insensitive to price swings. Demand has been so strong that most manufacturers can't keep up with it. Says Edzard Reuter, finance director of Daimler-Benz, "From a marketing standpoint, it would be absolutely wrong to respond to exchange rate variations by varying prices." Instead, the company, which sells cars in the U.S. for roughly twice the German price, is putting more into its Mercedes, including an antilock brake system as standard on all large models sold in the U.S. In Europe it remains an expensive option. While U.S. sales of most European carmakers went up nicely, revenues have soared.

U.S. sales of Sweden's Volvo, for example, will be up about 14% this year (in units), but should be up about 45% in Swedish kronor. It's much the same story at BMW, Saab, and Audi.

Perhaps the most spectacular result has been at Jaguar, recently spun off as a private company by the British government. In the past few years, Jaguar rebuilt its American sales practically from scratch, and U.S. sales now make up over half its total business. Just how much difference exchange rate movements make is shown in calculations by Hill Samuel & Co., a London merchant bank, published in the prospectus for the sale of Jaguar stock. The bank reckoned that if the pound had stayed around $2 rather than the $1.50 it averaged in 1983, Jaguar would have reported a loss last year instead of a $76-million pretax profit.

By some estimates, the major Japanese car companies are earning about 80% of their profits in the U.S. Import quotas have enabled the Japanese to avoid the price cutting they find necessary in their highly competitive home market. But the strong dollar also helps. Of all countries, Japan is its biggest beneficiary, with 30% of the country's exports going to the U.S. *Nihon Keizai*, Tokyo's financial newspaper, calculates that every 10-yen drop against the dollar will add about $30 million to Hitachi's pretax earnings in six months. (Recently the dollar traded at 245 yen.)

Another way non-U.S. companies can cash in is by becoming suppliers for American companies that are driven by the dollar to move manufacturing offshore. Daewoo's deal with Caterpillar Tractor to build lift trucks in South Korea is one example, as are the parts deals Detroit is discussing with such Asian automakers as Hyundai Motor in South Korea and Yue Loong Motor in Taiwan. Teksid, Fiat's metallurgical subsidiary, has long supplied cylinder heads to GM, Ford, and Chrysler, and last spring began selling hinges to Chrysler for its minivans. These deals could easily lose their shine with a drop in the dollar, though foreign suppliers do their best to write long-term contracts. In West Germany everybody from Karl Otto Pöhl, president of the central bank, on down has been urging German executives not to assume that the current situation is permanent. But that shouldn't prevent them from enjoying the ride while it lasts.—**Robert Ball** loss causes a company's return on equity to look better than it otherwise would: by shrinking the equity, it causes the return on equity to rise.

On income statements, though, the strong dollar can savage profits. An upswing in the value of greenbacks during a quarter can overwhelm a rise in unit sales abroad and destroy a company's expectations for improved earnings. Those deflated profits also have pronounced cash-flow consequences. When the money sits abroad and is used to buy goods priced in dollars (such as oil), it buys less than it once did. When the profits are sent home, they add up to fewer dollars. A parent worried about a further strengthening of the dollar, in fact, will often speed up a planned repatriation of earnings, as Minnesota Mining & Manufacturing did recently with a dividend from its Australian subsidiary.

Multinationals can use the foreign currency market to hedge against fluctuations, ensuring themselves against the bad things that a strengthening dollar does to offshore profits. For example, a multinational could offset the French francs it expects to earn on operations in the next year by selling a compensatory amount of francs "forward"—that is, by contracting to deliver francs to a bank a year hence at an agreed-upon price. The contract insulates the company from adverse changes in exchange rates on the dollars at stake, though of course the estimate of earnings may prove wrong. On the other hand, the company will be shut out from realizing a gain on *favorable* exchange rate movements.

SOME COMPANIES consider forward contracts and other hedging devices for protecting the value of foreign profits to be essential. General Electric, for example, views the cost of hedging as necessary insurance. But Monsanto's chief financial officer, Francis A. Strobel, considers the contract prices that banks negotiate too rich to make the deals worthwhile. "For us," says Strobel, "hedging is not the answer."

Instituting price increases abroad is another form of defense. But competition may keep the lid on prices or allow only small increases. Said a recent Goldman Sachs research report: "The extraordinary strength of the U.S. dollar is burdening third-quarter earnings for several major U.S. chemical companies. Price hikes cannot offset the dollar's dramatic strength."

U.S. exporters and U.S. companies facing competition from imports have even deeper problems. When the dollar strengthens, all other factors remaining equal, the costs of the foreign producer, as expressed in dollars, will decline and it will be able to beat its U.S. competitor on price (see box). U.S. exports will skid, imports into the U.S. will rise, and U.S. manufacturers will bleed. U.S. consumers, though, will benefit: those inexpensive imports will hold down the rate of inflation by pressuring U.S. producers to keep prices low. The American economy has been reaping that benefit on all kinds of products, ranging from potables (wine) to nonpotables (industrial chemicals) to any item using steel and copper.

U.S. exports skidded in 1982 and 1983, and this year, despite a revitalized world economy, they will be below 1981's level. Imports meanwhile will sharply exceed the 1981 total. So powerful are today's currency effects that the U.S. is importing major quantities of goods that sound like bizarre candidates for long-distance trade. Cement? Imports of ultracheap cement all the way from Spain have recently been invading the California market, making life difficult for such local producers as Kaiser Cement.

Many industries are forced by the strong dollar to think hard about the disadvantages of a U.S. location and to at least entertain thoughts of shifting their manufacturing abroad. At some corporations, the thoughts are no more than a growing "bias"—3M's description. Says its chief financial officer, Harry A. Hammerly, "We haven't made any decision to invest overseas. But margins in the products we export, such as our health care line, have suffered. I think if we were to expand capacity in that line, it just might happen overseas." At the opposite end of the action spectrum are companies that have already bitten the bullet, undertaking a big shift offshore.

Such a move works best when accompanied by action on the home front. Many companies assaulted by foreign competition have been making prodigious efforts to improve their U.S. productivity—closing inefficient plants, automating heavily, installing "just in time" inventory systems. "I run into some companies that aren't doing anything at all," says John R. Frantz of Boston Consulting Group. "Those are the companies that thought this problem would go away. But the well-managed companies are taking a combination approach: they're fixing up in the U.S. and they're moving overseas."

	1983 CURRENCY TRANSLATION LOSS in millions	COMMON STOCKHOLDERS' EQUITY AFTER ADJUSTMENT FOR LOSS in millions
IBM	**−$763**	**$22,219**
Mobil	**−$553**	**$13,952**
Exxon	**−$539**	**$29,443**
Ford Motor	**−$376**	**$7,545**
Goodyear Tire & Rubber	**−$119**	**$3,016**

Low-Visibility Losses

A 1981 accounting rule allows U.S. companies to apply currency translation losses directly to stockholders' equity, bypassing the income statement. Among the 50 largest industrials, these five took the biggest hits in 1983.

A shift in a company's manufacturing base can be accomplished in more than one way. A shutdown of capacity in the U.S. effectively does the job. A less draconian approach is a heavier "loading" of foreign plants when a given product can be manufactured either domestically or abroad. Rohm & Haas, for example, used to supply its Latin American market for water-treatment chemicals from the U.S. Today its choice of supply is Europe, where production costs less. Outright additions to facilities overseas naturally accomplish a manufacturing shift. A more flexible solution is increased purchasing of components overseas (which, when imported, will of course enlarge the U.S. trade deficit). In a recent survey of 152 manufacturing companies, the Machinery and Allied Products Institute found that 77% of them had increased their global "sourcing" (the industry's term) over the last few years. Buying abroad is, as one respondent put it, a "hot topic."

A move to manufacturing and buying overseas is not a course that charms executives tied emotionally to the U.S. These executives do not like to "export jobs" and dread being blasted by unions and politicians for doing so. Other aspects of going abroad also dismay U.S. managers: shifting production can't be done quickly. "You don't switch overnight to building tractors abroad," says a Caterpillar man. The dispersion of manufacturing to overseas sites also undercuts the economies of mass production in U.S. plants. Typically, a plant opened in Europe becomes a prisoner of national employment policies, with management retaining little flexibility to cut the work force.

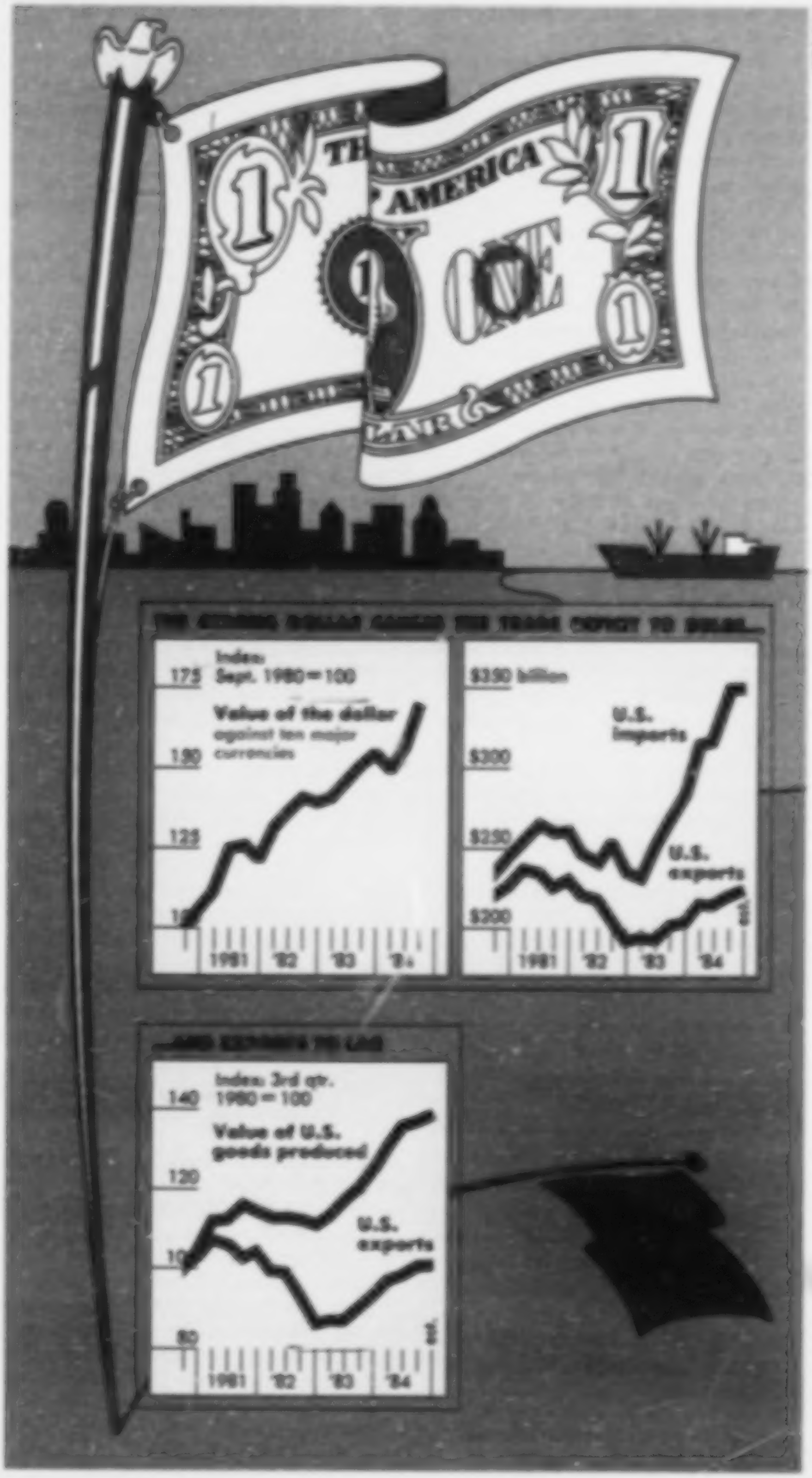
And what about the egg on a company's face if it makes a wholesale shift out of the U.S. and then the dollar turns weak? Consider the example, German variety, of Volkswagen, which in the mid-1970s evaded a strong deutsche mark by beginning to produce cars in the U.S. Today Volkswagen of America is at best a marginal moneymaker, beset by other problems than the dollar—most notably, by its unappealing cars—but also burdened by the same costs that are weighing down other U.S. manufacturers.

Frantz of BCG says the key to moving abroad is to analyze comparative production costs, U.S. vs. foreign, and then to lead the move with products that once set down in a well-chosen new location are likely to enjoy a cost advantage no matter what the exchange rate. To make a product whose manufacture consumes a lot of energy, a company might, for example, go to Canada, which is going to be forever blessed with cheap hydroelectric power. The costs of labor are more changeable, but Frantz expects that Korea, Taiwan, and Brazil will have comparatively low wages for a long time—and thus also have a near-permanent cost advantage. Costs in the Far East explain why U.S. auto companies have been heading there. GM has a joint venture to build cars in Korea, Ford is considering expansion of its plant in Taiwan, and Chrysler is talking to both countries about manufacturing possibilities.

Frantz gives high marks for moving abroad to Ingersoll-Rand, which with BCG's advice began restructuring its global strategies in 1982 after a new man, James E. Perella, took over international operations at the machinery maker. The company was then making about 75% of the products it sold internationally in U.S. plants. Now the proportion is below 60% and declining.

Ingersoll-Rand has shied from building plants overseas—it has, in fact, closed some it judged inefficient. Says a Perella lieutenant, D. King Cunningham: "You don't want to be in the position of making very basic decisions and then having the dollar swing." Ingersoll-Rand did build a compressor plant in Avellino, Italy. "We are confident," says Cunningham, "that the Italian lira will forever be soft against the dollar."

In the U.S., meanwhile, Ingersoll-Rand has closed 15 plants, consolidated a lot of offices, and renegotiated its labor contracts, securing concessions from workers. The company's U.S. employment has dropped from 34,500 in 1981 to 23,300 now. Including a $40-million charge for the restructuring going on internationally, the company last year took a $138-million write-off that bumped it into the red but gave it hopes, according to its 1983 annual report, of emerging "a stronger, more resourceful company." It has at least emerged profitable: earnings for



The Dollar's Deviltry

Since late 1980 the U.S. dollar has appreciated 70% against a trade-weighted average of ten other major currencies. In 1984 the trade deficit in merchandise could exceed $120 billion.

MICHAEL L. ABRAMSON

A stark reminder of export woes, this worldwide parts distribution center Caterpillar started building in 1982 sits abandoned—for now—in Illinois.

1984's first three quarters were $36 million (on $1.8 billion in sales), around 30% of what they were back in 1981.

At Caterpillar the losses—$177 million in the first nine months on $4.9 billion in sales—by no means stem from the dollar alone. The construction equipment market worldwide has been weak. Cat also concedes that it got pretty complacent a few years back. It would be locked in strenuous battle with its major competitor, Japan's Komatsu, even if the dollar were at its 1980 level. Still, the dollar's damage is mighty. Since 1981, Caterpillar has cut its U.S. employment from 86,000 to 63,000, announced the permanent closing of five U.S. plants, and waged an efficiency drive that after adjustment for inflation has cut 14% from the company's costs. Says Chairman Lee L. Morgan: "The organization has developed skills of cost reduction it didn't know it had." But since 1981, the yen has weakened about 11%, offsetting most of Caterpillar's cost improvement. Add efficiency gains that Komatsu itself has been making and you end up with Caterpillar losing ground in the cost competition.

CATERPILLAR wants to get eight more percentage points of cost improvement by the end of 1985, and it broods a lot about the dollar. Says Executive Vice President Donald V. Fites: "Let's face it. If you've got 75% of your assets in the U.S. and 50% of your sales outside it, and the dollar's strong, you've got problems." Caterpillar has said it will "shop the world" for components, about 70% of which the company now produces internally (against Komatsu's 30%). More than 50% of the pistons the company uses in the U.S. already come from abroad, mainly from a Brazilian company. Some work previously done by Cat's Milwaukee plant has recently been moved to a subsidiary in Mexico.

Caterpillar is also stopping most production of lift trucks in the U.S. and in a few months will begin importing a new line—complete with Cat's yellow paint and logo—from Korea's Daewoo. The shift to Daewoo was dictated by the economics of lift trucks: in excess supply and highly price-sensitive, they are made chiefly by the Japanese, whose production costs Cat simply couldn't match in the U.S. At Daewoo, a small contingent of Cat employees will guard quality and have the final say on what product can be shipped. Even so, the move to trust an outside manufacturer—in a newly industrialized country yet—is a radical departure for Caterpillar. "Five years ago," says Lee Morgan, "this project would not even have received consideration."

The plant closings are perhaps not over at Cat. Don Fites talks of "excess capacity" in the U.S. and of the need to disperse more manufacturing overseas. Right now Cat has dual sources, domestic and foreign, for some products, and it expects to set up dual sources for others. These will allow Cat to

ABBAS—MAGNUM

Instead of exporting *bed linens to Europe, West Point-Pepperell cuts costs by shipping cloth to this factory in Ghent, Belgium, for finishing.*

"load" the plant that offers the best economies of production, given exchange rates at any moment. But these arrangements also create manufacturing redundancies and impede the move to cut costs. Morgan says you just have to live with this problem for the sake of flexibility.

Cat has also set up Caterpillar World Trading Corp., which will try to develop incremental sales through countertrade. In such deals, possibly involving a dollar-starved Latin American country, Cat will get paid in some commodity other than cash—perhaps an edible currency like bananas. The company will then have the job of converting the bananas into cash, its ultimate profit depending on how slippery that job turns out to be.

Other U.S. companies have also leaned on countertrade deals to wrestle business from foreign competitors. Mack Trucks, whose once thriving export business has all but disappeared, recently sold trucks to the Dominican Republic through a distributor, who then in effect got paid in sugar. Mack's president, John B. Curcio, says the deal didn't make that much money—"but you have to keep trying," he adds, "or you will lose your customers to the competition."

MARKETING persistence has become a way of life at Omark Industries, a Portland, Oregon, manufacturer of chains for chain saws that its president, John L. Warne, calls "the IBM of this business." Omark has historically exported 40% of its output. It faces a rugged German competitor, Stihl. "Our first decision when the dollar went up," says Warne, "was to maintain our world market at all costs, even at the expense of our profits." The company has not raised its prices for 3½ years and its profits have dropped 42% since 1980. But if the dollar ever turns, Stihl had better watch out because Omark has seen this crisis as a reason to bear down on productivity. It is both fixing up things internally and shifting production out of the U.S. A Canadian plant that makes chains is now running at 100% capacity. The Portland plant, whose production costs are 25% higher, is down at 80%. Omark has also sent 65 of its top management to Japan to study manufacturing methods and quality control procedures there, and the company has installed many of these techniques in its plants.

The productivity improvements being made at America's Omarks are a brighter side of the strong dollar. They are a way of coping that holds promise for the future and that is infinitely preferable to the cop-out of protectionism. But it would be wrong to be pollyannaish about the other side of the strong dollar—the geographical imperative American companies feel to move manufacturing overseas. For all their attempts to stay flexible, these companies are making changes that will be hard to undo should the dollar begin its long-awaited decline. ■

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PRODUCTS OF THE YEAR

DETROIT'S NEW ASIAN CAR STRATEGY

GOOD NEWS AHEAD FOR PRODUCTIVITY

DECEMBER 10, 1984
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Corporate Performance

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IS IBM PLAYING TOO TOUGH?
IBM

Robert Risko's cover illustration symbolizes IBM's new aggressiveness. See page 34.

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INVESTMENT BETS FOR 1985

Most promising, say a majority of Wall Street prophets, are stocks likely to climb if interest rates fall.

■ Will next year's stock market resemble a ripening plum or a shriveling prune? To get a feel for the coming year FORTUNE canvassed the seers at five Wall Street houses on their economic and investment outlook for 1985. As expected, the federal deficit is a big wild card in the future of stocks and bonds. Uncertain, too, is just how long the economy can continue to expand. The recovery, after all, will be in its third year. Still, Wall Street faces 1985 in a mood of moderate optimism.

None of the analysts interviewed foresees recession, or even a bear market, during 1985. The stock market, they say, should begin the year in an upbeat mood, benefiting from declining interest rates and a more manageable level of economic growth. As the months pass, the ballooning federal deficit will become more of a problem, but for now, most strategists say, let the good times roll. By most accounts the decline in interest rates has a way to go, and clients are being urged to load up on stocks that will benefit, such as those of banks, thrifts, and insurers. Merrill Lynch, Prudential-Bache and Shearson Lehman/American Express, perhaps the most bullish on the longer-term outlook for interest rates, are also urging a healthy helping of bonds.

In a search for stocks most sensitive to interest rates, Fred Fraenkel, director of research at Pru-Bache, has come up with recommendations for some of the depressed insurers like **Continental Group** and **Travelers**. Shearson Lehman is looking to banks and thrifts. "We like **Bankers Trust**, **Manufacturers Hanover**, and **Chemical Bank** in the banking area, and **Golden West Financial** and **Home Federal of San Diego** among the thrifts," says Michael Sherman, chief stock picker at Shearson Lehman. "These stocks haven't really moved because the market doesn't yet believe that interest rates will continue coming down." Merrill Lynch

Five Prognoses

Though their projections vary, the brokerage firms below all foresee slower growth and continued low inflation. The firms' seers diverge on the question of which securities to buy.

BROKERAGE FIRM	PROJECTIONS FOR 1985 Real GNP Growth[1]	Inflation Rate[1]	Long-Term Interest Rate[2]	Growth in Corporate Profits[1]	RECOMMENDED INVESTMENTS
Dean Witter	1.8%–2.6%	6.4%	13.5%	5.9%	Stocks likely to benefit from increased capital spending; interest-rate-sensitive stocks
Goldman Sachs	3.2%	5.6%	13%–14%	6.1%	Stocks of big-capitalization companies and low-cost producers
Merrill Lynch	3.0%	4.7%	11.0%	9.3%	Interest-rate-sensitive stocks and those likely to gain from increased capital spending; long-term bonds
Prudential-Bache	3.0%	3.8%	10.5%	4.0%	Stocks of market-share leaders in a dozen industries; utility stocks and medium-term bonds
Shearson Lehman/ American Express	3.4%	3.9%	11.9%	8.5%	Stocks that could rise on renewed consumer spending; interest-rate-sensitive stocks; long-term bonds

[1] Fourth quarter 1984 to fourth quarter 1985
[2] Fourth quarter 1985

ILLUSTRATIONS BY JOHN PIRMAN

strategist Michael Aronstein expects utility stocks and long-term bonds to continue leading the interest-sensitive parade.

Market analysts at Dean Witter are also telling clients to play an interest-rate-sensitive hand, but only for a while. The firm's chief economist, Arnold Moskowitz, expects interest rates to trend up sharply by the second quarter of next year and foresees a rate on long-term Treasury bonds surpassing 14%, up from the current rate of 11.7%, before rates settle back to 13.5% by year's end. For fleet-footed investors, John Connolly, Dean Witter's top strategist, thinks there's a quick killing to be made in Golden West and Home Federal among the thrifts.

Goldman Sachs begs to differ. Long or short term, the prophets there foresee only hand-wringing among owners of interest-sensitive stocks. They're also warning clients that bond prices will perform like lead sinkers. Not that Goldman's inflation outlook is any less sanguine than others, but the firm expects a clash between private sector and government borrowing that will push interest rates higher. Short-term investments, they say, will be the year's safest and most profitable. For those willing to venture into stocks, strategist Leon Cooperman advises a bunker portfolio full of what he calls "survival kit companies." These he describes as big-capitalization stocks of companies that are low-cost producers and are able to finance growth without trekking to the debt markets. These self-sufficient companies, he says, will be among the few to prosper in a harsh environment of slow economic growth, low inflation, and rising interest rates. Among the fittest, he says, are **Signal Companies**, an industrial conglomerate; **Cross & Trecker**, a machine tool builder; and **American Cyanamid**, a chemical producer.

Though Prudential-Bache's chief economist, Edward Yardeni, is proclaiming what he calls "a basic prosperity forecast," of low inflation and declining interest rates, the firm's stock pickers are reluctant to wager on late bloomers. "We aren't betting on any company that has not already shown some ability to increase earnings," states equity research director Fred Fraenkel. Among Fraenkel's list of favorites are **General Dynamics** and **Martin Marietta**, both primarily defense contractors; **Roadway Services**, a trucking firm; and **Santa Fe Southern Pacific**, the transportation conglomerate.

As long as the economy stays healthy, there's sure to be plenty of action next year in capital goods suppliers. These companies, which supply the technology and heavy equipment that business needs to expand, are the classic late starters in the mature stages of an economic recovery. Merrill Lynch is suggesting a generous helping of capital goods companies in the construction, machinery, and electrical equipment industries. Connolly at Dean Witter recommends loading up on technology stocks that benefit from industry's drive to boost productivity with computers. Says Connolly: "These stocks are the only place where you can find strong earnings and strong unit growth." He's filling his basket with stocks of semiconductor companies like **Texas Instruments** and computer makers like **Digital Equipment**, **Data General**, and of course **IBM**. "At ten times estimated 1985 earnings, IBM is so cheap you almost don't want to own anything else," he says.

In the third year of an economic expansion, the stocks least likely to be courted by investors are consumer stocks—autos and appliance manufacturers—whose fortunes are tied to the consumer's pocketbook. These stocks are cherished in the early stages of an economic expansion as the consumer satisfies pent-up demands, but soon taper off as individuals spend themselves out. But Michael Sherman of Shearson Lehman thinks consumers are ready to step up their buying and that the stock market will soon be consumer-driven again. He's loading up on the likes of **Ford Motor** and **Whirlpool** as the market's prospective leaders for the months ahead. If he's right, the scenario that began in August 1982 could be in for a rerun.

RESEARCH ASSOCIATE *Margaret A. Elliott*

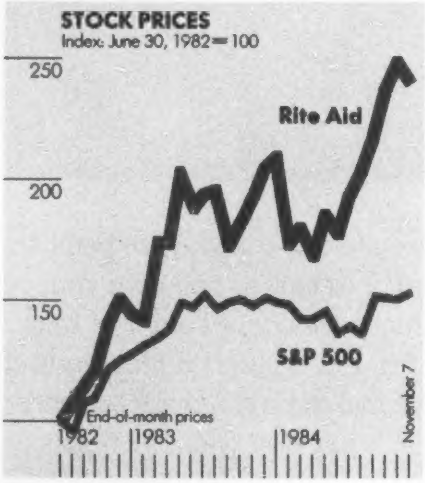
A European Bond Emigrates to the U.S.

■ Tired of the same old debt securities? How about something really different that offers a chance to win big if the dollar keeps declining? In mid-November the ten-country European Economic Community served up what are believed to be the first bonds issued for public sale in the U.S. denominated in something other than U.S. dollars. The proposed $114 million of 12-year debentures, to be co-managed by Bear Stearns, First Boston, and Morgan Stanley, will be denominated in a basket of currencies known as ECUs (pronounced "EKUs"), short for European currency units. The currencies are weighted according to each EEC member's gross national product, with the West German deutsche mark weighing the most and the Greek drachma the least. ECUs are the world's third most widely used "currency," after the dollar and the deutsche mark, in international debt securities.

As the dollar has risen, the ECU has fallen—from $1.12 in 1981 to a recent low of 76 cents. But many economists expect a sizable retreat of the dollar next year. If that happens and interest rates fall as well, American purchasers of ECU bonds could reap a double gain in the value of their investment.

One Drug Chain's Potent Growth Formula

■ So winning are the ways of **Rite Aid Corp.** that one of its executives ran for governor of New York three years ago partly on the strength of its record. Lewis Lehrman, a former president of the Pennsylvania-based chain of discount drugstores (fiscal 1984 sales: $1.2 billion), lost badly to Mario Cuomo. But Rite Aid's shareholders are still enjoying a landslide of capital gains. Since 1980 the stock has risen by more than 200%, not to mention an average annual 26% hike in dividends. Though Rite Aid sells at 15 times expected 1984 earnings, security analysts



The Rite Stuff

Rite Aid's bounding growth and generous dividend payouts have propelled it far higher than the S&P 500 since mid-1982.

JANUARY 7, 1985

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AMERICA'S MOST ADMIRED CORPORATIONS

FORTUNE'S ANNUAL SURVEY

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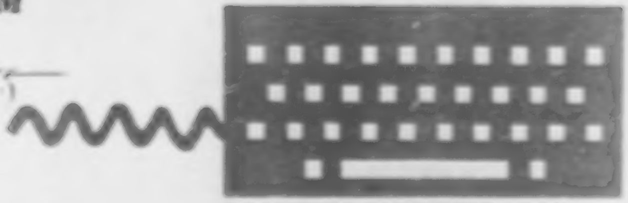

Hewlett-Packard

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UNION CARBIDE: COPING WITH CATASTROPHE

CAN CHRYSLER KEEP THE PEDAL TO THE METAL?

MARVIN DAVIS: HOLLYWOOD'S FOXIEST FINANCIER

JANUARY 7, 1985 VOL. 111, NO. 1

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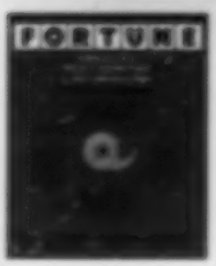
Looking Ahead



John Pirman designed the cover's representation of America's five best-regarded companies. See page 18.

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CORPORATE PERFORMANCE / COVER STORY

AMERICA'S MOST ADMIRED CORPORATIONS

The way big companies are perceived can change overnight—ask Union Carbide. Except for No. 1 IBM, last year's ten most admired have swapped places or disappeared. Who's least admired? Continental Illinois displaces International Harvester.

■ *by Patricia Sellers*

ONCE AGAIN IBM is the most admired of 250 large U.S. corporations ranked in FORTUNE's annual survey of corporate reputations. But after two years as the least admired company, International Harvester has moved up to No. 245, turning the cellar spot over to one of its big lenders, Continental Illinois. Elsewhere in the survey, too, change is rampant. Minnesota Mining & Manufacturing becomes one of the ten most admired companies for the first time, and Eastman Kodak returns to the top ten. Coca-Cola rises from ninth to second, right on IBM's heels. Gone from the top ten: Time Inc., publisher of FORTUNE, now No. 22, and Johnson & Johnson, now No. 18.

At the other end of the list, for the first time industrial companies don't predominate. Five of the bottom ten are in service industries. Besides Continental Illinois, they include a diversified financial company, Financial Corp. of America, and three airlines: Pan Am, Eastern, and TWA. Continental, Financial Corp., and Asarco are making first appearances among the least admired. They replace three industrials: U.S. Steel, now No. 238, and two companies that disappeared from the survey this year, Republic Steel, acquired by LTV, and Warner Communications, which is no longer large enough to be included in the survey. Warner's revenues in 1983 declined sharply as its Atari subsidiary staggered; Atari was sold in 1984.

Admiration seems to go hand in hand with profits (see box, page 22). Median return on shareholders' equity of the ten most admired was 18% in 1983, compared with 10.6% for the FORTUNE 500. None of the top ten has had an annual loss in 35 years or more. By contrast, five of the least admired reported losses in 1983, and the median return on equity of the other five was 8.1%.

A company need not reward its shareholders generously to be among the most admired. The top group's median total return to investors (stock appreciation plus reinvested dividends) was only 10.3% annually over the past ten years. That was better than the 5.7% annual median return of the least admired, but not as good as the FORTUNE 500's 14.6%. In 1983 alone, the ten most admired returned a median 15.5% to shareholders, below both the 18.7% median return of the least admired and the 30.2% return of the 500. "This surprises me a little, but it shows you that when everybody loves a company, beware of the stock," says John D. Connolly, investment strategist at Dean Witter Reynolds, a New York brokerage firm.

In the corporate reputations survey, FORTUNE polled 8,000 executives, outside directors, and financial analysts. About 52% responded—a good return. Those surveyed were asked to rate the ten largest companies in their industry, using a scale of 1 (poor) to 10 (excellent), on eight key attributes: quality of management; quality of products or services; innovativeness; long-term investment value; financial soundness; ability to attract, develop, and keep talented people; community and environmental responsibility; and use of corporate assets. The rankings on the following pages show how each company is regarded in its industry.

The industries surveyed are 25 of the largest in the FORTUNE 500 and FORTUNE Service 500 directories of U.S. industrial and non-industrial corporations. Industries with fewer than ten companies—textiles, tobacco, and shipbuilding, for example—were excluded from the survey. All but one of this year's industry groups were included in last year's survey: rubber and plastic products has replaced mining and crude oil production, a group that shrank to nine companies when Mobil purchased Superior Oil.

FORTUNE bases its industry groups on categories established by the U.S. Office of Management and Budget. Companies are assigned to industry groups according to the business that contributed most to 1983 sales (or assets, for certain industries). Sometimes a company competes in an industry group where it feels it doesn't belong. For example, a top executive of Gulf & Western Industries complains that his company shouldn't be rated with the apparel group because G&W is a conglomerate with interests in films (Paramount), publishing (Simon & Schuster), financial services, and electronics, as well as apparel. Gulf & Western ranks eighth in the apparel group.

Top-ranked IBM scored slightly lower than last year—8.44 vs. 8.53—but still handily beat the other companies in the survey on four attributes: management quality, investment value, financial soundness, and use of assets. IBM's biggest decline in score was for innovativeness; it dropped from third to fourth among the ten companies in its industry. A possible reason: IBM's PCjr home computer, introduced in late 1983, was a dud until the company updated it with an expand-

ILLUSTRATIONS BY JOHN PIRMAN

AT THE TOP AND BOTTOM OF THE 250 COMPANIES

The most admired

IBM continues its reign as the most admired large U.S. corporation. Eastman Kodak returns to the top ten after falling out of the group last year, while 3M makes a first appearance. The scores are averages of ratings on eight attributes of reputation.

Rank	Company	Industry Group	Score
1	**IBM**	Office equipment, computers	8.44
2	**Coca-Cola**	Beverages	8.34
3	**Dow Jones**	Publishing, printing	8.31
4	**3M**	Precision instruments	8.13
5	**Hewlett-Packard**	Office equipment, computers	8.08
6	**Anheuser-Busch**	Beverages	7.96
7	**Boeing**	Aerospace	7.80
8	**General Electric**	Electronics, appliances	7.79
9	**Eastman Kodak**	Precision instruments	7.72
10	**Merck**	Pharmaceuticals	7.66

The least admired

Continental Illinois, Financial Corp. of America, and Asarco are newcomers. International Harvester plows out of last place. Eastern and Pan Am tied in total points—and in the tie breaker each outscored the other on four of eight attributes.

Rank	Company	Industry Group	Score
250	**Continental Illinois**	Commercial banking	2.58
249	**Financial Corp. of America**	Diversified financial	3.41
248	**Manville**	Glass, concrete, abrasives, gypsum	3.80
246	**Pan Am**	Transportation	3.86[1]
246	**Eastern Air Lines**	Transportation	3.86[1]
245	**International Harvester**	Motor vehicles and parts	4.11
244	**American Motors**	Motor vehicles and parts	4.37
243	**TWA**	Transportation	4.42
242	**Asarco**	Metal manufacturing	4.57
241	**Pabst Brewing**	Beverages	4.59

[1] Tie. Each scores higher than the other on four of eight attributes.

EIGHT KEY ATTRIBUTES OF REPUTATION

Quality of management

Most admired	Score
IBM	9.15
Dow Jones	8.62
Anheuser-Busch	8.61

Least admired	Score
Continental Illinois	1.83
Financial Corp. of America	2.76
Manville	3.97

Innovativeness

Most admired	Score
Citicorp	8.93
Gannett	8.32
3M	8.27

Least admired	Score
Continental Illinois	4.07
Asarco	4.23
St. Regis	4.36

Quality of products or services

Most admired	Score
Dow Jones	9.04
Boeing	8.87
Coca-Cola	8.78

Least admired	Score
Financial Corp. of America	4.50
Continental Illinois	4.88
Eastern Air Lines	4.96

Long-term investment value

Most admired	Score
IBM	8.83
Dow Jones	8.33
Coca-Cola	8.26

Least admired	Score
Continental Illinois	1.41
Eastern Air Lines	2.45
Financial Corp. of America	2.57

ed memory and more workable keyboard. The rapid response to PCjr's marketing problems won kudos. "One of the things that's tremendously admirable about IBM is its ability to adjust quickly to market demands," says Carol Muratore, a computer analyst with Prudential-Bache Securities, a New York investment firm.

The ballots FORTUNE received near the close of the survey period rated IBM particularly high, suggesting that respondents liked IBM's flurry of late-September announcements—a $1.25-billion merger with Rolm Corp., a telecommunications equipment maker; a step into the personal computer software market; and the naming of President John F. Akers to succeed John R. Opel as chief executive in February.

The second most admired corporation, Coca-Cola, ranks among the three most admired for quality of products, investment value, financial soundness, and use of assets. The world's largest beverage company, Coca-Cola leads its industry group in every category except quality of management, where Anheuser-Busch has the edge.

Coca-Cola scored its biggest gain in innovativeness. "Diet Coke, no doubt," says Chairman Roberto C. Goizueta, speaking of the most successful new product in soft-drink history. After taking charge in 1981, Goizueta introduced Diet Coke, reorganized the company's bottler network, and acquired

Financial soundness

Most admired	Score
IBM	9.41
Coca-Cola	8.94
Dow Jones	8.89

Least admired	Score
Continental Illinois	1.40
Financial Corp. of America	1.97
Eastern Air Lines	2.04

Community and environmental responsibility

Most admired	Score
Eastman Kodak	8.35
Johnson & Johnson	8.09
IBM and **3M** (tie)	7.96

Least admired	Score
Manville	3.13
Financial Corp. of America	3.58
Continental Illinois	4.20

Ability to attract, develop, and keep talented people

Most admired	Score
Hewlett-Packard	8.36
IBM	8.29
Dow Jones	8.22

Least admired	Score
Continental Illinois	1.85
Manville	3.37
International Harvester	3.38

Use of corporate assets

Most admired	Score
IBM	8.52
Dow Jones	8.09
Coca-Cola	8.07

Least admired	Score
Continental Illinois	1.14
Financial Corp. of America	2.06
Eastern Air Lines	3.71

Columbia Pictures, which has come up with hits like *Tootsie*, *The Big Chill*, and 1984's top-grossing *Ghostbusters*. "We were like Wilt Chamberlain playing basketball on our knees," says Goizueta of the old Coca-Cola. "We had the talents but weren't using them. Now we're willing to take risks."

Dow Jones, the smallest of the ten most admired companies (1983 sales: $866.4 million), ranks third overall and first for product quality. Publisher of the *Wall Street Journal*, Dow Jones earned a lofty return on equity of 27.4% in 1983 (FORTUNE, December 24, 1984). But security analysts who participated in FORTUNE's survey ranked the company only second in the publishing group for investment value. Gannett, publisher of *USA Today*, is first in that respect, though Gannett had a 1983 return on equity of 18.8%.

A company that corporate executives and outside directors like more overall than financial analysts is 3M, which jumped from No. 11 to No. 4. Analysts ranked 3M 14th and gave it relatively poor scores for investment value and use of assets. The Minnesota company, selected by FORTUNE as one of eight corporate masters of innovation (October 15, 1984), rates among the top three in the whole survey for responsibility and innovativeness. New 3M products in 1984 included the first bionic ear, an electronic implant for deaf people.

Hewlett-Packard has the fastest-growing

profits of the ten most admired—earnings per share grew 21.75% compounded annually over the past decade—but it slipped from third to fifth place. The company had problems in 1984—personal computers that ran into distribution problems and were too high priced to compete with IBM, plus a management reorganization that got some bad press. But Hewlett-Packard again beat IBM on product quality and innovativeness and is tops in ability to attract talented people.

America's largest brewer, Anheuser-Busch, rose from No. 8 to No. 6. By spending heavily on marketing in the late 1970s, the company has built market share to 34%, from 26% in 1978. Says Arthur Kirsch, beverage analyst with Drexel Burnham Lambert, a securities firm, "They're the class company in the industry. Anheuser-Busch is pulling away from No. 2 Miller and making mincemeat of everybody else."

Boeing, which supplies 60% of the non-Communist world's commercial jets, climbed to No. 7. It ranks first in the aerospace group for every attribute and second among the 250 for product quality. Boeing improved its score for financial soundness and now ranks No. 27 for that attribute. The company's shareholders have enjoyed an average annual return of 36.9% over the past ten years, a better payback than for any other company in the most admired group.

The best category for General Electric,

THE SURVEY'S BIGGEST GAINERS—AND LOSERS

■ Industry trends and gains or declines in profits seem to have a lot to do with how companies' scores changed since last year's survey of corporate reputations. The ten companies that had the largest point gains from last year posted a median profit increase of 116% in the first nine months of 1984—and each had a profit gain of at least 49.6% from the same period in 1983. All but two of the ten companies with the largest drops in scores recorded declines in earnings for the first nine months. The exceptions: St. Regis and Aetna Life. Two of the ten—Continental Illinois, whose score took the biggest hit, and Armco—lost money as well as points.

Buoyed by recovery of the airline industry, profits of the survey's biggest point gainer—AMR, parent of American Airlines—doubled in the first nine months of 1984. Its score in the survey went from 5.94 to 6.89, and its standing in the transportation group rose from sixth to third. AMR scored its biggest point gains for quality of management, investment value, and financial soundness. It ranks first among transportation companies for innovativeness. American's cost-saving two-tier wage pact, which pays new workers as little as half of old workers' salaries, is being adopted by competitors. UAL, owner of airline giant United, climbed from seventh to sixth in the transportation group and is another of the biggest point gainers.

Scores of the Big Three automakers soared this year as they turned in record profits after a three-year slump that was the longest and deepest since World War II. With prosperity, General Motors, Ford, and Chrysler sharply improved their ratings for financial soundness. So short of cash three years ago that it raised $500 million by selling a purchase option on its New York office tower, GM rose to fourth among the survey's 250 companies for financial soundness. And for the first time since the survey began, GM leads the motor vehicles and parts group. Last year the company ranked No. 3 in the group.

Ford jumped from sixth to fourth, perhaps helped by better ideas—like a switch from boxy styling to rounded aerodynamic design. Ford still ranks behind GM and Chrysler for management quality but scored ahead of its big rivals for product quality—it was rated the best automaker in that category. Chrysler moved from seventh to fifth overall in the auto group and scored best for management and innovativeness. The first manufacturer to bring back the convertible in 1982 and now the first U.S. automaker to produce the hot-selling minivan, Chrysler ranks seventh for innovativeness among the 250 companies in FORTUNE's survey.

The auto industry's turnaround made things easier for glassmaker Libbey-Owens-Ford as well. The company, which posted the fifth-largest point gain in FORTUNE's survey, supplies about 60% of GM's glass needs. Two other big gainers in Libbey's industry group, U.S. Gypsum and National Gypsum, benefited from early 1984's home construction boom. U.S. Gypsum ranks fifth in the building materials group, but security analysts rated the company best of the bunch, even higher than PPG Industries and Corning Glass Works.

Two companies that posted large point gains—Mead and RCA—have spent the past couple of years divesting themselves of unprofitable or ill-fitting divisions. Mead jumped from ninth to fourth in the forest products group, with a substantial increase in its score for financial soundness. The company has been reducing debt and has divested all nonpaper operations except its fast-growing Mead Data Central, which includes an electronic news retrieval system called Nexis and a computerized legal research service named Lexis.

RCA's standing among the 250 companies has risen sharply. Two years ago the company was on the least admired list, but this year it moved all the way up to No. 161. After a decade of management shake-ups and ill-fated acquisitions, RCA is focusing on the businesses it knows best—electronics, communications, and entertainment (NBC). But RCA still ranks eighth among the ten diversified service companies surveyed. Its rating for asset management: last of the group.

Practically all news was bad news in the banking industry in 1984, and scores declined for eight of the ten banking companies—all except Security Pacific and Bankers Trust New York. Continental Illinois, Manufacturers Hanover, and BankAmerica posted large enough score declines to make the list of biggest point losers. Continental's score plunged more than two points to 2.58, the lowest composite score ever recorded in FORTUNE's survey, making the company the least admired of 250 big U.S. corporations.

Manufacturers Hanover, whose problem loans in Latin America have generated a lot of publicity, slipped from seventh to eighth in its group and recorded big declines for soundness and use of assets. BankAmerica, the second-largest bank holding company, fell from sixth to seventh among the banks after ranking third in the group two years ago. "BankAmerica's turnaround is taking longer

No. 8, is management quality, where it ranks fourth among the 250 firms. That's a tribute to no-nonsense Chairman John Welch Jr., who has shown little mercy in scrapping slow-growth, low-return businesses (FORTUNE, August 6, 1984). In the electronics group, GE scored best for all attributes except innovativeness and responsibility.

Ninth-ranked Eastman Kodak scored big where many of the top ten fared poorly—community and environmental responsibility. Kodak ranks first in that category and fourth among the 250 for product quality, but doesn't do nearly as well on management, innovativeness, and investment value. Security analysts, in particular, seemed unimpressed with Kodak's 1984 profit turnaround from a distressing 1983.

After ranking No. 4 last year (and No. 5 the year before), Merck slid to tenth place. Again the security analysts were less enthusiastic than other survey respondents. They ranked Merck 24th among the 250 companies and third in the drug group behind Abbott Laboratories and Bristol-Myers. Long known as the industry's research powerhouse, Merck hit a dry spell about five years ago that it is only now emerging from, and has encountered labor, regulatory, and foreign exchange problems.

Merck's problems pale, however, beside those of the least admired companies. Continental Illinois ranked last in the commercial banking group last year, and its score declined more than two points this year, putting the company last among the 250. Its lowest rating—a pathetic 1.14—was for use of assets. It ranks last among the 250 companies for every attribute except community and environmental responsibility and quality of products or services.

Financial Corp. of America, which until

Biggest gainers

Company	Score	Point change
AMR (American Airlines)	6.89	+.95
General Motors	7.50	+.87
Ford Motor	6.72	+.77
Chrysler	6.61	+.70
Libbey-Owens-Ford	6.07	+.69
Mead	5.83	+.63
U.S. Gypsum	6.20	+.62
UAL (United Airlines)	6.48	+.62
National Gypsum	5.64	+.61
RCA	6.08	+.61

Biggest losers

Company	Score	Point change
Continental Illinois	2.58	−2.31
Levi Strauss	6.63	− .91
Merrill Lynch	6.59	− .90
Armco	4.80	− .79
ITT	5.08	− .76
St. Regis	4.62	− .73
Manufacturers Hanover	5.39	− .73
BankAmerica	5.46	− .71
Aetna Life	5.69	− .71
American Express	6.74	− .70

Ups and Downs in Total Scores

These tables show which companies had the biggest increases and decreases in scores from last year. Changes greater than 0.3 are statistically significant. Industrial companies are big point gainers this year, while most of the biggest losers are service firms.

than everyone thought," says one security analyst. "It's like turning a battleship around in a bathtub."

The only insurance company on the list of biggest point losers is Aetna Life, which tumbled from fourth to seventh among the insurers and scored worst of the ten for soundness and asset management. In part, its decline may be attributed to the troubles of its parent, Aetna Life & Casualty, which lost almost a billion pretax dollars on property and casualty underwriting in 1982-83. American Express, ITT, and Armco also got nipped by underwriting losses in property and casualty units. With big problems in its Fireman's Fund insurance subsidiary, American Express scored one of the ten biggest point losses among the 250 companies in the survey, but it still held on to second place in the diversified financial group. ITT's Hartford Insurance is just one of the conglomerate's businesses that have been clobbered in the past couple of years. ITT fell from eighth to least admired in the electronics group.

Armco, the FORTUNE 500's second-biggest money loser in 1983, thought it was being smart when it diversified into insurance. Wrong. The Ohio steelmaker eliminated its dividend last August after failing to sell its money-losing insurance operations. Ranked second among metal manufacturers in FORTUNE's survey two years ago, Armco now ranks eighth. Financial analysts rated it lowest among metal manufacturers.

Two companies on the list of biggest point losers fell from the top spots in their industry groups for the first time. After a year of slim profits, layoffs, and management restructuring, Merrill Lynch dropped to third among the diversified financial companies. The drop in Merrill Lynch's score for management quality was particularly precipitous. Levi Strauss has battled overcapacity by closing plants and cutting staff. But the company doesn't earn points for its efforts. The once highly profitable jeans maker, slow to diversify away from a sagging market for its biggest product, plunged from first to fourth in the apparel group on a decline in score of almost a full point.

St. Regis, the only forest products company among the big point losers, slipped from seventh to last place in its industry group, coming up with a dismal overall score of 4.62. The company owns a profitable insurance business, but no matter: it spent most of 1984 and more than $160 million tussling with unwanted suitors before agreeing to be bought by Champion International to create the world's largest paper company.

this year was too small to be included in the survey, fell into second-to-last place. FCA, parent of American Savings & Loan Association, the largest U.S. thrift institution, scored last among the 250 for product quality and among the bottom three for five other attributes. Yet it ranks in the top half of the survey group for being innovative. With liberal accounting and a high-risk growth strategy, FCA's previous management made earnings per share grow faster from 1973 to 1983 than those of any other company among the 100 largest diversified financial firms. FCA's investors got a lofty ten-year return of 45.5% annually. In 1984, the company had to restate earnings, sparking a run on deposits, and the management was changed. "Those innovations did them in," says one security analyst.

While the airline industry staged a remarkable recovery in 1984, three airline companies landed among the ten least admired: TWA, Eastern, and Pan Am. Eastern scored last in the transportation group, and among the survey's bottom three, for four attributes—quality of products or services, investment value, financial soundness, and asset management. Pan Am, whose labor costs mounted in 1984, ranks below Eastern for the four remaining attributes. Only TWA is expected to earn a profit in 1984.

Manville, No. 248, is making money, but has about 25,000 lawsuits lodged against it for supplying asbestos. The Denver-based company, still in bankruptcy court, ranks last for responsibility and among the three least admired for management and ability to attract talented people. Chairman John A. McKinney says many executives in the building materials industry don't like his company because their firms have sued and been sued by Manville. However, financial analysts surveyed gave Manville even lower ratings than executives and directors did.

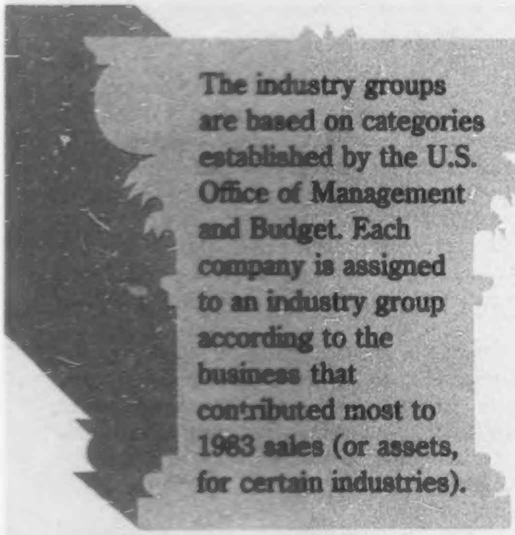
International Harvester's reputation is improving. Two years ago Harvester scored just 2.62 overall. Last year its score rose to 3.64, and now it is 4.11. Once ranked among the three least admired for every attribute except product quality, Harvester this year landed in the bottom three only for ability to attract talented people.

Feeble American Motors, No. 244, couldn't climb out of the bottom ten even though 1984 was the best year automakers ever had. Despite some successful products—its Renault-designed Alliance was *Motor Trend* magazine's 1983 Car of the Year and the new Jeep Cherokee won a spate of awards in 1984—the company scored lowest in its group for product quality. In a market that has turned back to size and luxury, AMC is still making only relatively austere subcompacts and expects only a small profit this year. Admits Chief Executive José Dedeurwaerder: "We need a broader product range."

HARSH MARKETS battered the other two least admired companies. Asarco, a mining firm that ranks No. 242, saw its slim profits collapse as silver and copper prices tumbled in 1984. Pabst, No. 241, floundered as Anheuser-Busch strengthened its domination of the beer industry.

The reputations of individual companies often rise and fall with their industries' health, but the chief lesson to be drawn from this year's survey is clear: good managers build golden reputations. Respondents overwhelmingly rated management quality as the most important attribute in gauging corporate reputations.

HOW COMPANIES RANK IN 25 INDUSTRIES



The industry groups are based on categories established by the U.S. Office of Management and Budget. Each company is assigned to an industry group according to the business that contributed most to 1983 sales (or assets, for certain industries).

Aerospace

Boeing leads its industry group as usual. Lockheed has climbed from No. 8 to No. 2 in three years, but memories of near bankruptcy in 1971 linger: it ranks eighth for financial soundness. General Dynamics rates last for product quality and community and environmental responsibility.

Rank	LAST YEAR	Company	Score
1	1	Boeing	7.80
2	4	Lockheed	6.90
3	3	Rockwell International	6.80
4	2	United Technologies	6.78
5	8	Signal Cos.	6.74
6	6	McDonnell Douglas	6.73
7	7	Northrop	6.72
8	5	General Dynamics	6.53
9	9	Martin Marietta	6.45
10	10	Grumman	6.17

Apparel

Levi Strauss, which hasn't had much luck diversifying away from a fading jeans market, tumbles from the top apparel spot for the first time. The new champ is VF, the maker of Lee jeans and Vanity Fair intimate apparel. VF got particularly high marks from security analysts. Hartmarx rates tops for product quality.

Rank	LAST YEAR	Company	Score
1	2	VF	7.30
2	3	Hartmarx	7.13
3	–	Oxford Industries[1]	6.68
4	4	Interco	6.63[2]
4	1	Levi Strauss	6.63[2]
6	5	Warnaco	6.62
7	6	Cluett Peabody	6.42
8	9	Gulf & Western Industries	6.04
9	10	Kellwood	5.75
10	8	Blue Bell[3]	5.65

Chemicals

FORTUNE's survey was completed before Union Carbide's catastrophic gas leak in India, but among the 250 companies it is only No. 195. The one category in which it ranks in the top half of its industry group: community and environmental responsibility. Du Pont scores highest except for use of assets.

Rank	LAST YEAR	Company	Score
1	1	Du Pont	7.47
2	2	Monsanto	6.88
3	3	Dow Chemical	6.71
4	4	Hercules	6.39
5	6	American Cyanamid	6.18
6	7	W.R. Grace	5.78
7	5	Union Carbide	5.68
8	–	Williams Cos.[1]	5.39
9	10	Celanese	5.33
10	–	National Distillers & Chemical[1]	5.18

Beverages

Coke is it. The world's largest beverage company replaces Anheuser-Busch as the group's most admired. Coca-Cola leads for every attribute except management quality, for which it ranks second to Anheuser-Busch. PepsiCo improved its score but remains a distant third. General Cinema is a Pepsi bottler.

Rank	LAST YEAR	Company	Score
1	2	Coca-Cola	8.34
2	1	Anheuser-Busch	7.96
3	3	PepsiCo	7.37
4	–	MEI[1]	7.06
5	7	General Cinema	7.02
6	5	Joseph E. Seagram & Sons	6.78
7	6	Brown-Forman	6.47
8	4	G. Heileman Brewing	6.45
9	9	Adolph Coors	5.87
10	10	Pabst Brewing	4.59

Commercial banking

J.P. Morgan, the most profitable of the major banking companies, rates first in its group for every attribute except innovativeness and community responsibility. Citicorp leads the 250 for innovativeness but ranks fifth in the banking group for financial soundness. BankAmerica gets the nod for responsibility.

Rank	LAST YEAR	Company	Score
1	1	J.P. Morgan	7.49
2	2	Citicorp	7.29
3	3	Security Pacific	7.04
4	4	Bankers Trust New York	6.65
5	5	First Interstate Bancorp	6.07
6	8	Chemical New York	5.90
7	6	BankAmerica	5.46
8	7	Manufacturers Hanover	5.39[4]
9	9	Chase Manhattan	5.39[4]
10	10	Continental Illinois	2.58

[1] Not ranked last year.
[2] Tie. Each scores higher than the other on four of eight attributes.
[3] Taken private November 1984.
[4] Tie. Manufacturers Hanover scores higher than Chase Manhattan on five of eight attributes.

HOW COMPANIES RANK IN 25 INDUSTRIES

Diversified financial

First Boston, an investment banking firm, overtakes American Express and Merrill Lynch, which remains No. 1 for innovativeness. American Express is first for investment value and quality of products or services. Cigna, hit by property and casualty underwriting losses, slides to ninth.

Rank	LAST YEAR	Company	Score
1	3	First Boston	6.92
2	2	American Express	6.74
3	1	Merrill Lynch	6.59
4	5	Travelers Corp.	6.18
5	6	Aetna Life & Casualty	5.91
6	9	Great Western Financial	5.88
7	8	Federal Natl. Mortgage Assn.	5.71
8	10	H.F. Ahmanson	5.64
9	7	Cigna	5.59
10	–	Financial Corp. of America[1]	3.41

Electronics, appliances

Motorola scores best for innovativeness and AT&T Technologies (AT&T's manufacturing arm) for responsibility, but General Electric captures first place for all other attributes. ITT tumbles to last, taking the place of Warner Communications, which is now too small to be included in the survey.

Rank	LAST YEAR	Company	Score
1	1	General Electric	7.79
2	2	Motorola	7.06
3	3	Emerson Electric	7.01
4	–	AT&T Technologies[2]	6.74
5	5	Raytheon	6.27
6	6	Texas Instruments	6.20
7	–	North American Philips[1]	5.95
8	7	Westinghouse Electric	5.79
9	8[3]	Litton Industries	5.64
10	8[3]	ITT	5.08

Diversified services

After a management shake-up at Phibro-Salomon, the investment banking and commodities trading firm slips to second in its group for management quality—but is still most highly regarded in the group overall. Super Valu Stores scores highest for management quality, investment value, and responsibility.

Rank	LAST YEAR	Company	Score
1	1	Phibro-Salomon	6.98
2	3	Super Valu Stores	6.94
3	2	Halliburton	6.82
4	6	Fleming Cos.	6.59
5	5	McKesson	6.54
6	7	CBS	6.48
7	4	Fluor	6.23
8	8	RCA	6.08
9	10	Farmland Industries	5.89
10	9	City Investing	5.62

Food

General Mills' 21-year streak of annual earnings increases ended in 1984, but the company still leads for every attribute. Beatrice, debt-heavy from its recent $2.8-billion acquisition of Esmark, sinks from ninth to tenth, despite an avalanche of image-touting advertising in 1984 ("You've known us all along").

Rank	LAST YEAR	Company	Score
1	1	General Mills	7.44
2	2	General Foods	7.01
3	4	Nabisco Brands	6.96
4	3	Dart & Kraft	6.79
5	6	Ralston Purina	6.67
6	7	Consolidated Foods	6.35
7	5	CPC International	6.06
8	8	Borden	5.98
9	–	Archer Daniels Midland[1]	5.92
10	9	Beatrice	5.26

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[1] Not ranked last year.
[2] Not ranked last year. Wholly owned by AT&T.
[3] Tied last year.

Forest products

Kimberly-Clark, which makes Kleenex, scores an easy win and rates best in the group for every attribute except financial soundness and community and environmental responsibility. Weyerhaeuser leads in those categories. International Paper's drop from fourth to eighth came on a small decline in score.

Rank	LAST YEAR	Company	Score
1	1	**Kimberly-Clark**	7.19
2	2	**Weyerhaeuser**	6.44
3	3	**Boise Cascade**	6.00
4	9	**Mead**	5.83
5	8	**Scott Paper**	5.79
6	5	**Champion International**	5.60
7	6	**Georgia-Pacific**	5.59
8	4	**International Paper**	5.53
9	10	**Crown Zellerbach**	5.12
10	7	**St. Regis**[1]	4.62

Industrial and farm equipment

Cooper Industries, a Houston-based maker of hand tools and oil and natural gas equipment, ranks first for asset use and ability to attract talented people. Cooper has diversified into electronic and electrical gear. Deere is still first for management quality and community and environmental responsibility.

Rank	LAST YEAR	Company	Score
1	–	**Cooper Industries**[2]	6.86
2	1	**Deere**	6.81
3	3	**Teledyne**	6.78
4	5	**Combustion Engineering**	6.50
5	4	**Borg-Warner**	6.43
6	2	**Caterpillar Tractor**	6.41
7	6	**Dresser Industries**	6.34
8	7	**Textron**	6.29
9	10	**Ingersoll-Rand**	5.96
10	8	**Baker International**	5.94

Glass, concrete, abrasives, gypsum

Corning Glass Works is most admired for four attributes—product quality, innovativeness, soundness, and responsibility. PPG Industries beats it on the other four. If security analysts alone had voted, Corning would have ranked third behind U.S. Gypsum and PPG. CertainTeed ranks ninth for every attribute.

Rank	LAST YEAR	Company	Score
1	1	**Corning Glass Works**	6.92
2	2	**PPG Industries**	6.74
3	3	**Owens-Corning Fiberglas**	6.55
4	4	**Owens-Illinois**	6.25
5	6	**U.S. Gypsum**	6.20
6	5	**Norton**	6.17
7	7	**Libbey-Owens-Ford**	6.07
8	9	**National Gypsum**	5.64
9	–	**CertainTeed**[2]	5.16
10	10	**Manville**	3.80

Life insurance

Scores declined across the board, with Aetna Life and Connecticut General hit hardest. Northwestern Mutual ranks No. 1 for six attributes. Prudential, the largest life insurer, wins for innovativeness and ties with Aetna Life for responsibility. Aetna ranks last for financial soundness and asset use.

Rank	LAST YEAR	Company	Score
1	1	**Northwestern Mutual**	7.16
2	2	**Prudential**	6.59
3	5	**Travelers**[3]	6.11
4	6	**Teachers Insurance & Annuity**	5.88
5	7	**John Hancock Mutual**	5.86
6	3	**Connecticut General Life**[4]	5.81
7	4	**Aetna Life**[5]	5.69
8	8	**New York Life**	5.68
9	9	**Equitable Life Assurance**	5.64
10	10	**Metropolitan**	5.53

[1] Acquired by Champion International November 1984.
[2] Not ranked last year.
[3] Wholly owned by Travelers Corp.
[4] Wholly owned by Cigna.
[5] Wholly owned by Aetna Life & Casualty.

HOW COMPANIES RANK IN 25 INDUSTRIES

Metal manufacturing

This group scores lower overall than any other, and only Reynolds Metals and National Intergroup improved their ratings. Asarco lands among the ten least admired of the 250 companies, while Alcoa remains most admired for every attribute. Kaiser Aluminum is the least admired for management quality.

Rank	LAST YEAR	Company	Score
1	1	**Alcoa**	6.89
2	4	**Reynolds Metals**	5.88
3	3	**Northwest Industries**	5.67
4	2	**Inland Steel**	5.59
5	7	**National Intergroup**[1]	5.48
6	6	**LTV**	5.20
7	8	**Kaiser Aluminum & Chemical**	4.91
8	5	**Armco**	4.80
9	9	**Bethlehem Steel**	4.68
10	–	**Asarco**[2]	4.57

Motor vehicles and parts

General Motors, moving up smartly, ranks as most admired of its group for five attributes. Chrysler wins for management quality and innovativeness, while TRW remains tops for product quality. American Motors is tenth for product quality and investment value. International Harvester is last in the other categories.

Rank	LAST YEAR	Company	Score
1	3	**General Motors**	7.50
2	1	**TRW**	7.17
3	2	**Dana**	6.93
4	6	**Ford Motor**	6.72
5	7	**Chrysler**	6.61
6	4	**Paccar**	6.38
7	–	**Ex-Cell-O**[2]	6.15
8	8	**Fruehauf**	5.49
9	9	**American Motors**	4.37
10	10	**International Harvester**	4.11

Metal products

Three companies new to the survey—Masco, Ball, and Stanley Works—make impressive showings but can't unseat Gillette as most admired. Gillette, which makes health and beauty products as well as razor blades, ranks among the survey's top ten for product quality and innovativeness.

Rank	LAST YEAR	Company	Score
1	1	**Gillette**	7.39
2	–	**Masco**[2]	7.04
3	–	**Ball**[2]	6.97
4	–	**Stanley Works**[2]	6.69
5	2	**Parker Hannifin**	6.49
6	3	**Continental Group**[3]	6.35
7	6	**American Can**	6.29
8	8	**Crown Cork & Seal**	6.10
9	9	**National Can**	5.66
10	10	**Chromalloy American**	5.38

Office equipment, computers

IBM and Hewlett-Packard beat third-ranked Wang by more than a point. IBM scores best for five attributes but trails Hewlett-Packard, Wang, and Digital Equipment for innovativeness. Control Data, often criticized for pumping money into low-return projects, scores worst of the ten for asset use.

Rank	LAST YEAR	Company	Score
1	1	**IBM**	8.44
2	2	**Hewlett-Packard**	8.08
3	4	**Wang Laboratories**	7.07
4	3	**Digital Equipment**	6.86
5	5	**NCR**	6.07
6	7	**Honeywell**	5.78
7	8	**Pitney Bowes**	5.57
8	6	**Control Data**	5.50
9	10	**Burroughs**	5.33
10	9	**Sperry**	5.00

[1] Ranked as National Steel last year.
[2] Not ranked last year.
[3] Taken private November 1984.

Petroleum refining

Standard Oil (Indiana) outscores Shell for the first time and ranks 11th among the survey's 250 companies. Last year Indiana Standard didn't lead in a single category, but here it rates best in the group for investment value, asset use, and ability to attract talented people. Exxon ranks first for financial soundness.

Rank	LAST YEAR	Company	Score
1	2	Standard Oil (Indiana)	7.65
2	1	Shell Oil	7.54
3	5	Exxon	7.31
4	3	Atlantic Richfield	7.23
5	4	Chevron[1]	6.75
6	6	Mobil	6.35
7	7	Phillips Petroleum	6.15
8	–	Sun[2]	6.0[illegible]
9	8	Texaco	5.63
10	10	U.S. Steel	4.75

Precision instruments

Eastman Kodak and 3M catapulted into the ranks of the ten most admired companies. Kodak leads in three categories—product quality, financial soundness, and community and environmental responsibility—while 3M takes the others. Polaroid is least admired for investment value and management.

Rank	LAST YEAR	Company	Score
1	1	3M	8.13
2	2	Eastman Kodak	7.72
3	4	EG&G	7.26
4	3	Perkin-Elmer	7.05
5	5	Tektronix	6.86
6	9	Xerox	6.61
7	8	Polaroid	6.47
8	7	Becton Dickinson	6.42
9	6	General Signal	6.38
10	10	Lear Siegler	6.22

Pharmaceuticals

Merck ranks fifth in the drug group for management quality, but its high overall score puts it among the ten most admired. Abbott is the top scorer in its industry group for management quality and asset use. American Home Products wins for financial soundness and Bristol-Myers for investment value.

Rank	LAST YEAR	Company	Score
1	1	Merck	7.66
2	3	Abbott Laboratories	7.57
3	2	Johnson & Johnson	7.48
4	6	Bristol-Myers	7.46
5	4	Pfizer	7.27
6	7	American Home Products	7.02
7	8	Eli Lilly	6.65
8	5	SmithKline Beckman	6.62
9	9	Upjohn	6.20
10	10	Warner-Lambert	6.10

Publishing, printing

This group boasts the highest median score—7.26—and all but Washington Post and Tribune rank in the survey's top 50. Dow Jones is third most admired among the 250. Gannett, publisher of USA Today, *rates second among the 250 for innovativeness but ninth in its group for product quality.*

Rank	LAST YEAR	Company	Score
1	1	Dow Jones	8.31
2	2	Time Inc.	7.42
3	3	Gannett	7.41
4	7	New York Times	7.32
5	8	R.R. Donnelley & Sons	7.31
6	6	Times Mirror	7.21
7	4	McGraw-Hill	7.18
8	5	Knight-Ridder Newspapers	7.06
9	9	Washington Post	6.83
10	10	Tribune	6.11

[1] Formerly Standard Oil of California.
[2] Not ranked last year.

HOW COMPANIES RANK IN 25 INDUSTRIES

Retailing

Sears increased its score only slightly but takes over first place as last year's leader, Federated Department Stores, slips to third. Ranked first last year for only two attributes, Sears is now No. 1 in every category measured except product quality. Federated, the owner of Bloomingdale's and I. Magnin, wins there.

Rank	LAST YEAR	Company	Score
1	2	Sears Roebuck	7.14
2	4	J.C. Penney	6.78
3	1	Federated Department Stores	6.63
4	3	Kroger	6.37
5	7	Safeway Stores	6.35
6	9	K mart	6.28
7	8	American Stores	6.20
8	–	Southland[1]	6.13
9	5	Lucky Stores	6.10
10	10	Household International	5.33

Transportation

United Parcel Service ranks first in the group, but had only security analysts voted, AMR, parent of American Airlines, would be first. UPS leads the group for four attributes, while AMR wins for innovativeness. Delta scores highest for asset use, responsibility, and ability to attract talented people.

Rank	LAST YEAR	Company	Score
1	1	United Parcel Service	7.23
2	2	Delta Air Lines	6.99
3	6	AMR (American Airlines)	6.89
4	4[4]	CSX	6.73
5	–	Santa Fe Southern Pacific[1]	6.52
6	7	UAL (United Airlines)	6.48
7	4[4]	Burlington Northern	6.41
8	8	TWA[5]	4.42
9	10	Eastern Air Lines	3.86[6]
9	9	Pan American World Airways	3.86[6]

Rubber and plastic products

This industry group appears for the first time, replacing mining and crude oil production, which now includes too few companies to be surveyed. Rubbermaid and Goodyear lead handily, and each scores best on four attributes—Rubbermaid for product quality, innovativeness, investment value, and asset use.

Rank[2]	Company	Score
1	Rubbermaid	7.59
2	Goodyear Tire & Rubber	7.50
3	Armstrong Rubber	6.32
4	Cooper Tire & Rubber	6.00
5	B.F. Goodrich	5.89
6	GenCorp[3]	5.73
7	Firestone Tire & Rubber	5.54
8	Dayco	5.32
9	Dorsey	5.22
10	Uniroyal	5.19

Utilities

AT&T ranks at the top of its group for every attribute of reputation but hasn't made it back to the ten most admired list. Two years ago, before divestiture, AT&T was No. 6 in the survey; now it is No. 28. GTE is last in its industry group for product quality, but analysts score it best for investment value.

Rank	LAST YEAR	Company	Score
1	1	AT&T	7.31
2	2	Texas Utilities	6.86[7]
3	3	Southern California Edison	6.86[7]
4	4	GTE	6.68
5	6	Pacific Gas & Electric	6.46
6	5	Commonwealth Edison	6.40
7	8	American Electric Power	6.18
8	7	Southern Co.	6.15
9	9	Public Service Electric & Gas	6.08
10	10	Middle South Utilities	5.42

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[1] Not ranked last year.
[2] This industry was not surveyed last year.
[3] Formerly General Tire & Rubber.
[4] Tied last year.
[5] Spun off from Trans World Corp. (ranked eighth last year) February 1984.
[6] Tie. Each scores higher than the other on four of eight attributes.
[7] Tie. Texas Utilities scores higher than Southern California Edison on six of eight attributes.

■

THE COMING GLUT

For an MCI fiber-optic link *between Cleveland and Chicago, this cable plow digs a trench along a CSX Corp. railroad right-of-way in Indiana. MCI plans to*

OF PHONE LINES

If all the fiber-optic telephone systems that have been announced are built, the U.S. long-distance network will soon sextuple in size. Some bettors on fiber will get hurt, but customers will find ways to put the glut to use.

■ *by William B. Johnston*

lay 18,000 miles of fiber by 1988.

MAKING USE OF astounding advances in technology, a dozen companies plan to spend some $6 billion in the next four years to build new long-distance telephone networks that will be the backbone of the U.S. communications system in the 1990s and beyond. Using lasers and hair-thin glass fibers, these new fiber-optic systems will be able to carry up to 400,000 light-borne calls simultaneously over a single cable less than an inch in diameter—ten times as many as today's densest microwave-radio route.

If all the new projects get off the drawing boards, the capacity of the U.S. long-distance network would grow more than sixfold in the next four years (see table). In November AT&T revealed plans to complete a 10,000-mile fiber network by 1988. Fibertrak, a joint venture of two railroad holding companies, Norfolk Southern Corp. and Santa Fe Southern Pacific Corp., says it will build an 8,100-mile network on railroad rights of way. It is scheduled for completion in 1987.

United Telecommunications, a Kansas City-based company with estimated 1984 sales of $2.9 billion, plans a 23,000-mile system. MCI Communications and GTE Sprint Communications, a subsidiary of GTE, will each build a nationwide fiber-optic network; together they'll add 22,000 miles. Lightnet, a joint venture of CSX Corp. and Southern New England Telephone, is building a 4,000-mile system serving 43 cities in 24 Eastern and Midwestern states. Proposals for other regional systems abound.

The Yankee Group, a Boston research and consulting firm that follows the telecommunications industry, predicts a huge glut of long-distance capacity in the years ahead. "The only way we'll be able to use all this capacity," quips Howard Anderson, Yankee Group managing director, "is if Congress passes a law requiring every American to participate in five video conferences each day." Adds Dale F. Pilz, chief executive of GTE Sprint, "If all the recently announced building programs are carried out, first thing you know we'll have enough capacity to last this country forever."

RESEARCH ASSOCIATE *Sarah Smith*

Like most industry leaders, however, Pilz does not believe that all the systems will be built. Competition for capital, customers, and glass fiber will weed the talkers from the builders, he says, and keep supply from outdistancing demand. Most companies planning fiber systems agree that there won't be room for everyone, but none of the competitors seems ready to fold its hand just yet. Asserts William Esrey, executive vice president of United Telecommunications, "I don't know who else is bluffing, but we're not."

The rate at which fiber-optic technology is advancing makes at least a short-term glut seem inevitable. In 1983 M/A-Com, a telecommunications equipment supplier, installed what it thought was "the communications system of the future" at Disney World's Epcot Center in Florida. Capable of carrying 1,400 calls on each pair of fibers, the Epcot system used lasers that pulsed on and off 90 million times each second. The amount of data that can be transmitted is directly proportional to the number of pulses per second. Current fiber-optic systems operate at 560 million pulses per second, and suppliers are promising equipment that will triple these speeds by 1987. One maker of transmission equipment is Telco Systems Fiber Optics Corp. of Menlo Park, California. Referring to the early years of radio, Telco President Robert L. Bowman says, "We are still in the crystal-set era of fiber optics."

Systems now planned or installed are designed to be upgraded as new technology becomes available. AT&T initially will install a system capable of handling 6,000 calls per pair of fiber strands. In 1988 the company plans to upgrade its network to carry four times as many calls simply by installing new electronics in terminals and repeater stations along the routes.

With the increase in capacity comes a dra-

PHOTOGRAPHS BY OVAK ARSLANIAN

matic drop in costs. Measured by one common yardstick, the investment required to build a system to carry one call one mile—or cost per circuit-mile—fiber offers an 85% savings over present technology. George K. Petty, director of network planning for AT&T Communications, the long-distance arm of AT&T, says that his company's present network averaged more than $7 a circuit-mile when it was installed. Fiber systems, Petty says, can be installed for less than $1 a circuit-mile.

How will mind-blinding amounts of added low-cost transmission capacity be used? No one is quite sure, but the companies installing the new fiber-optic systems are confident that demand will rise to meet supply. Requirements for video teleconferencing, facsimile, and video-text services are increasing, they say, and video transmission requires much more capacity than voice or data. These companies also assert that fiber optics will make economically feasible many services that cannot yet be imagined. Says John Puente, vice chairman of M/A-Com: "I don't know exactly how these huge pipes will be used, but it will happen."

Encased in plastic, *glass fibers are wound at a General Cable plant in Massachusetts.*

History is on the side of the visionaries. The story of IBM's early estimate of the potential demand for mainframe computers (no more than 50 worldwide) is often repeated by fiber-optic enthusiasts. Americans may think little in a decade or so of dialing up a digital symphony after dinner or of sending a friend a copy of a favorite movie by phone.

For at least the next five years, however, fiber-optic networks will continue to be used primarily for the pedestrian task of transmitting the conversations of people. "Data transmission may be growing very rapidly," says C. Gus Grant, president of Fibertrak, "but it is still voice that pays the bills."

If voice is to pay for new investment in fiber systems, it must grow rapidly indeed. But most telecommunications analysts expect demand for long-distance voice service to grow at about its historical average of 9% to 10% per year, an increase of just under 50% by 1988. If all the planned new fiber networks are built, the total capacity of the U.S. long-distance system will grow some 500%, from about 1.4 billion circuit-miles to more than eight billion circuit-miles by 1988.

Though this excess of supply should cut wholesale prices for voice transmission via fiber networks, it will not have much immediate effect on the price consumers pay for long-distance telephone service. Transmission costs are a small share—typically less than one-fifth—of the total cost of long-distance service, with the costs of local switching, billing, marketing, and telephone company overhead making up more than four-fifths of the cost of a typical long-distance call. With retail prices largely unaffected, little short-term increase in demand for voice telephone service is likely.

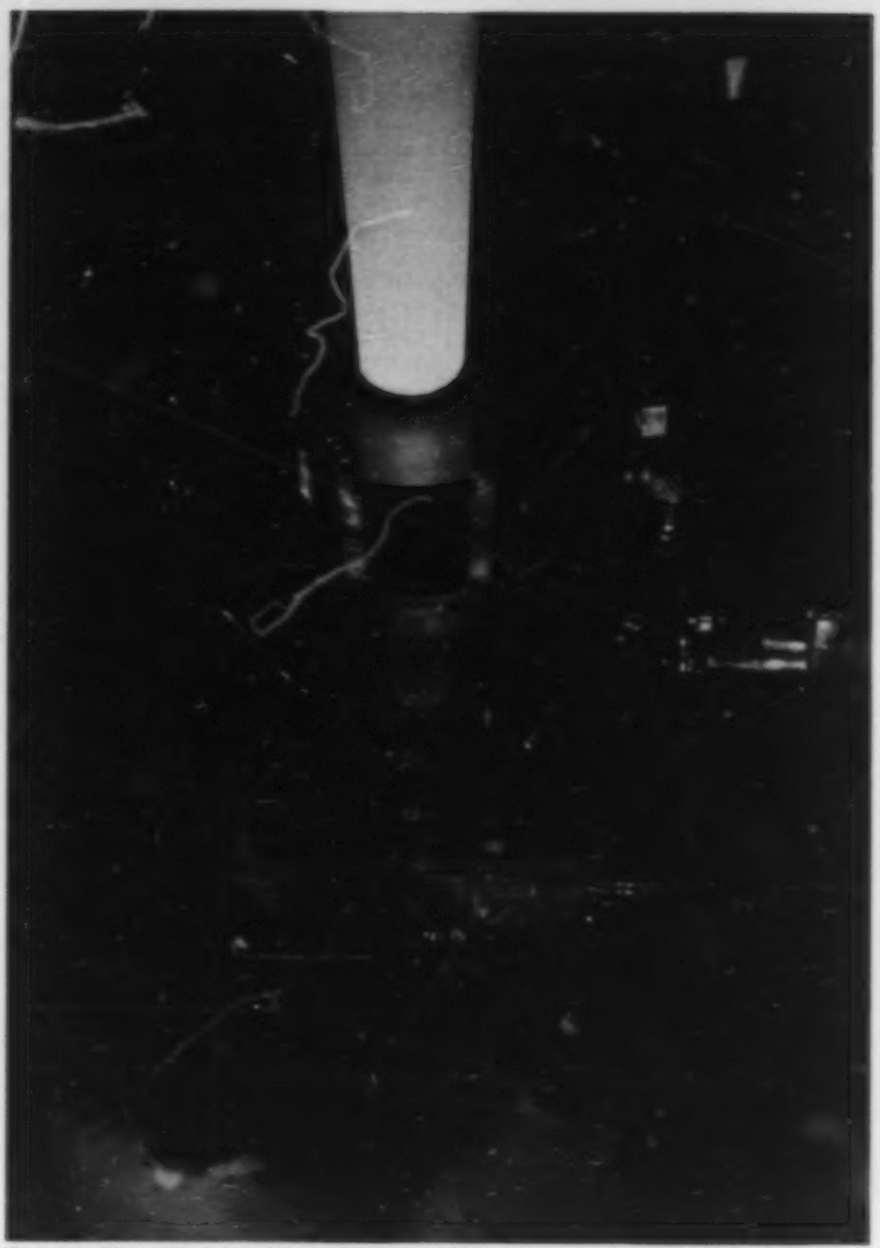
The prospect of a huge oversupply of transmission capacity to serve the voice market is causing second thoughts among some companies that have announced massive building programs and tight construction schedules. Several that initially planned separate building programs between the same cities have agreed to team up to share facilities and construction costs. United Telecommunications and Lightnet will get together to build and use fiber links between several cities east of the Mississippi. Many industry participants predict that more such sharing agreements will be announced before long. Some companies that are building regional fiber-optic systems plan to form a national consortium, hoping to strengthen their marketing positions without duplication of facilities.

SHORTAGES of glass fiber and electronic components could also slow the boom. Especially during 1985 there may be too little fiber to meet the ambitious building plans already announced. A fiber manufacturer concedes, "If everybody builds everything they are talking about, there will be a shortage." To meet the expected surge in demand, fiber suppliers are feverishly gearing up production. Corning Glass Works, a leading supplier of fiber, plans to increase annual capacity in 1985 to 620,000 fiber miles. That's probably more than the entire industry produced in 1984.

A more critical building material could also be in short supply: money. Several proposed ventures still need financing. They are likely to find a cool reception on Wall Street. An investment banker involved in a fiber-optics money-raising effort says that potential investors who got burned when overcapacity kept satellite companies from taking off as predicted "are evaluating fiber ventures very cautiously."

But obstacles to construction and efforts to consolidate may not be enough to head off a glut. The prospect of overcapacity is itself helping to fuel the overbuilding. Like office developers hoping to cash in on a temporarily tight leasing market, the network builders are all scrambling to climb through the same window of opportunity. Fearful that customers will sign up with whoever first offers service, and hoping to scare off competitors, most companies are hurrying to bury cable and begin operations. "It's very important to be first," says Lawrence A. McLernon, chief executive of Litel, a new venture actively building a fiber network in the upper Midwest. He adds: "The time for making decisions is a nanosecond."

Potential customers apparently agree. Satellite Business Systems, a McLean, Virginia,



Corning Glass Works engineers *in North Carolina draw molten glass into hair-thin fibers.*

company that provides long-distance voice and data services over its own satellite network, is negotiating with several companies to acquire fiber transmission facilities for part of its voice traffic. Says Joel Engel, SBS vice president of engineering: "We're ready to make some commitments to move this process along." Michael Richer, chief executive of Allnet, a rapidly growing long-distance company headquartered in Chicago, is even more emphatic about intending to sign long-term transmission contracts soon. "We're not going to be shopping for capacity in 1988," he asserts.

An old telecommunications industry mindset may also encourage overbuilding. For years companies in the business have believed that their long-term survival depended on owning transmission facilities. Among AT&T rivals, says Grant of Fibertrak, who was formerly vice chairman of Southern Pacific Communications Corp., the predecessor of GTE Sprint, "the belief that you had to own your own network was based on years of grief trying to obtain circuits from AT&T." This build-don't-buy philosophy, and the desire to control completely the quality of the services offered customers, underlies decisions by MCI, GTE, and United to construct their own systems.

Apparently being first into a market is not enough to scare off the competition. In Florida, where Microtel and MCI are already operating, GTE and Lightnet are installing fiber and AT&T plans to build a system. Several construction crews have inadvertently plowed up and severed fiber cables laid by rivals.

ONCE MULTIPLE systems are installed, a price war is almost sure to break out. With most of their capital already buried in the ground and with low variable costs of serving new customers, fiber-optic network owners will have every incentive to cut each other's throats.

A group certain to benefit from the bloodshed: big resellers of telephone service, who buy large amounts of transmission capacity at bulk rates and sell it at retail rates to business and residential customers. A few carriers are so sure of an impending glut that they are turning their backs on the axiom that mandates ownership of facilities. "We have chosen not to make further substantial investments in transmission capacity because we believe there will be plenty of capacity available," says Robert J. Braverman, chief executive of ITT Communications and Information Services Group. He is talking about low-cost capacity, of course.

In an effort to attract customers, new carriers are offering increasingly attractive prices and terms. Lightnet has recently reduced the price it quotes for high-volume, long-term services. Many carriers are promising "most favored nation" status to prime customers, guaranteeing that they will always receive the lowest prices offered by the carrier to other similar customers. One carrier, LDX Net, is even offering to guarantee large customers that it will meet *any* price offered on similar terms by anyone competing in its markets in the future.

Large business customers that operate their own communications networks may also benefit from a fiber glut, especially if they can find ways to tap directly into the new low-cost long-distance networks. Long-distance rates currently subsidize local residential service—a strong incentive for large business users to bypass local exchanges. The existence of far cheaper, high-volume information superhighways will make it even more attractive for companies to construct their own links to the long-distance telephone network.

The new fiber-optic networks will not benefit everyone. Companies that have invested heavily in other long-distance technologies,

COMPANY Investors	AREAS SERVED	INVESTMENT[1]	CIRCUIT[1] MILES	ROUTE MILES Completion date
AT&T Communications	**Nationwide**	**$1.3 billion**	**1.7 billion**	**10,000** 1988
MCI Communications	**Nationwide**	**$500 million**	**650 million**	**18,000** 1988
GTE Sprint	**Nationwide**	**$130 million**	**110 million**	**4,000** 1989
United Telecommunications	**Nationwide**	**$2 billion**	**1.2 billion**	**23,000** 1988
Fibertrak Santa Fe Southern Pacific and Norfolk Southern	**Nationwide**	**$1.2 billion**	**2.4 billion**	**8,100** 1987
LDX Net Kansas City Southern Industries	**Midwest and South**	**$110 million**	**165 million**	**1,700** 1986
Electra Communications Cable & Wireless and Missouri-Kansas-Texas Railroad	**Texas**	**$40 million**	**72 million**	**550** 1985
Microtel Alltel, E.F. Hutton, M/A-Com, Centel, and Norfolk Southern	**Florida and Georgia**	**$60 million**	**45 million**	**1,500** 1986
Litel Telecommunications Centel, Alltel, and Pirelli	**Upper Midwest**	**$57 million**	**85 million**	**1300** 1986
Lightnet CSX and SNET	**South, East, and Midwest**	**$500 million**	**650 million**	**4,000** 1986
SouthernNet E.F. Hutton and independent telephone companies	**Southeast**	**$90 million**	**50 million**	**1,600** 1986
RCI Rochester Telephone	**Northeast and Midwest**	**$90 million**	**87 million**	**900** 1986

[1] Hudson Institute estimates

Players and Plans in the Great Fiber-Optics Race

These dozen companies say they plan to add more than seven billion circuit-miles to the U.S. long-distance telephone network. One circuit-mile equals one voice conversation carried over one mile of telephone line. Circuit-miles now available in the U.S. : an estimated 1.4 billion.

such as satellites and microwave radio, may find fiber systems invading their markets. In particular, the use of satellites for voice telephone service appears threatened. Because the cost of satellite calls is the same no matter how far the call travels, satellites have been widely used for very long distance calls. But cheap fiber circuits could undercut this economic advantage. Major long-distance telephone companies now believe that satellites should be used only for backup service, or on routes that carry few calls but span great distances.

Some telephone executives insist that there will be a place in the network for all technologies, pointing out that 15 years ago there were unfounded predictions that satellites would completely outmode microwave-radio transmission. But as Esrey of United says, speaking of voice communications, "If I were in the satellite business, I would be concerned."

While industry rivals debate who can build fiber links more quickly and cheaply, and who can manage them more efficiently, the real issue is simple: who will have the customers? Carriers that are building fiber systems to serve a substantial existing customer base are in a far stronger position than those who are betting that they can build first and find customers later. "Anybody can build these big pipes," says Petty of AT&T. "The trick is filling them."

The "carriers' carriers" such as Fibertrak, Lightnet, and Electra, which intend to sell transmission services wholesale, may be in a particularly precarious position. Not only must they battle for the relatively few customers not served by AT&T, MCI, or GTE, they must also be concerned with whether the resellers and other customers they attract can stay in business. If a shakeout occurs, traffic generated by these customers could be shifted suddenly to other fiber-system operators or the established carriers.

SURPRISINGLY, AT&T may benefit most from the fiber-optic revolution, though much of its current network will be outmoded by the new technology. With huge traffic volumes, the company will get a greater payoff than others from installing high-capacity fiber. And because much of AT&T's construction program is not scheduled to be completed until the late 1980s, the company may have the luxury of choosing between building facilities or buying capacity at fire-sale prices from fiber ventures that falter.

A successful AT&T could cast a dark shadow over the shining prospects its rivals see in fiber optics. Many of the companies assume that they will prosper because they expect the industry giant's share of the long-distance market will drop from its current 92% to as little as 60% to 70% by 1990. But the industry leader may not lose so much ground. A study submitted to the Federal Communications Commission by the Ad Hoc Telecommunication Users Committee, a group of large businesses, suggests that, contrary to general belief, AT&T may be the lowest-cost producer in the industry. If the FCC were to permit open competition, says the committee, it's doubtful that many other carriers could survive, let alone increase their market shares.

AT&T may decide it has to give up market share voluntarily to avoid stringent government regulation. Or the FCC might decide to continue policies that give the company's rivals a cost break, on the notion that doing so fosters competition. But none of the smaller companies rushing to expand the U.S. long-distance network can count on that. If AT&T holds onto its preeminent position, many companies betting on fiber optics will be turning out the lights. ■

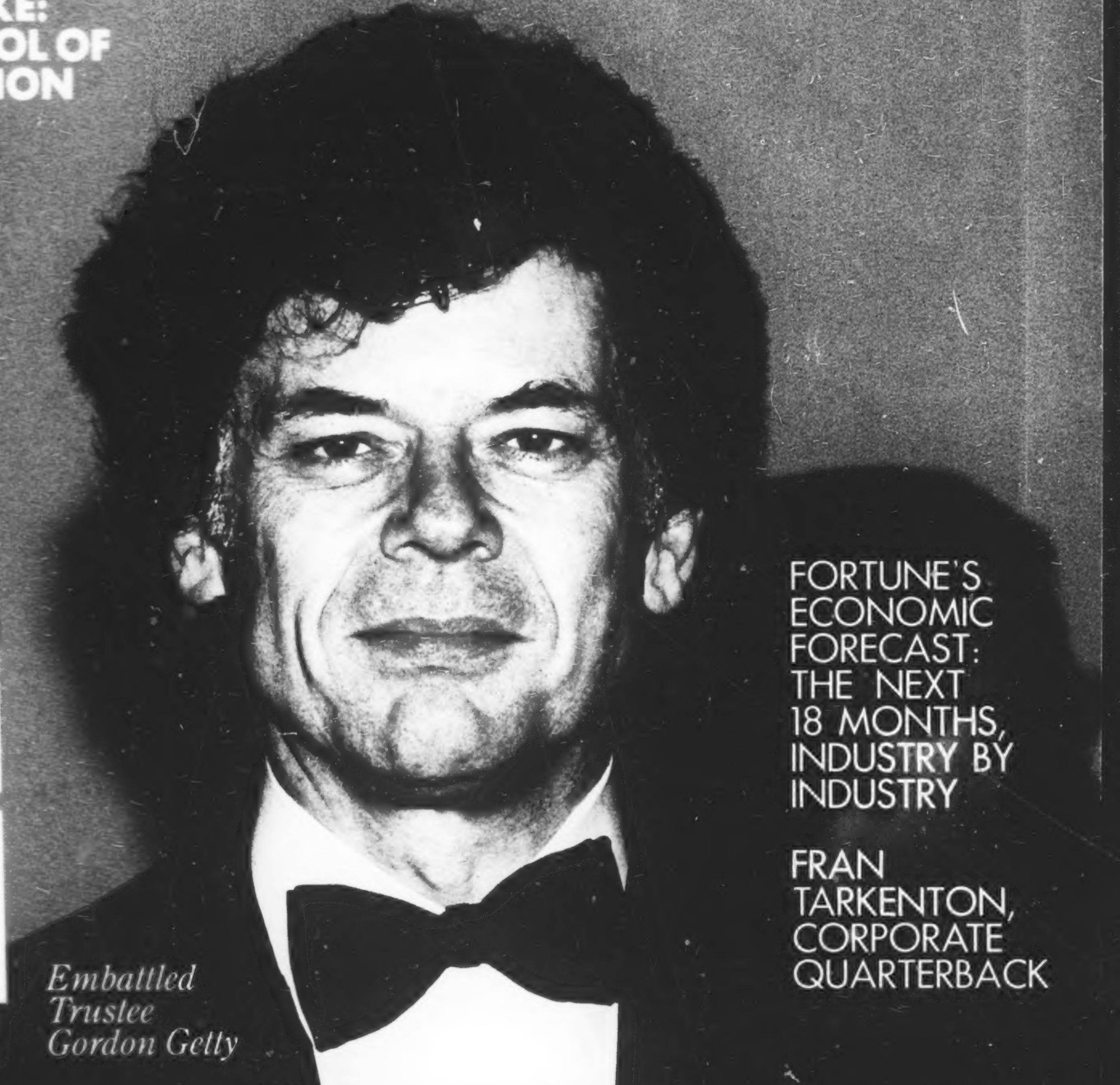
JANUARY 21, 1985
$3.00

FORTUNE

THE BIGGEST DEALS OF THE YEAR

THE WAR BETWEEN THE GETTYS

AT STAKE: CONTROL OF $4 BILLION



Embattled Trustee Gordon Getty

FORTUNE'S ECONOMIC FORECAST: THE NEXT 18 MONTHS, INDUSTRY BY INDUSTRY

FRAN TARKENTON, CORPORATE QUARTERBACK

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JANUARY 21, 1985
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FORTUNE

2538
Corporate Performance

FORTUNE
THE WAR BETWEEN THE GETTYS

Gordon Getty, target of the titanic litigation described in the article on page 20, recently appeared at a fund-raising dinner in San Francisco, where he was photographed by John Harding.

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DEALS OF THE YEAR

The big players in a busier-than-ever 1984 were oil companies scrambling to consolidate and line up reserves. The architects of leveraged buyouts also set new records, and even giant General Motors and IBM pulled off a big acquisition apiece.

■ *by H. John Steinbreder*

STAGGERING SUMS changed hands in the top business deals of 1984. The two largest acquisitions in U.S. corporate history—Chevron's purchase of Gulf and Texaco's of Getty—carried price tags of $13.2 billion and $10.1 billion respectively. Both deals beat the previous record set when Du Pont purchased Conoco for $7.2 billion in 1981. The total value of the corporate combinations and securities transactions on FORTUNE's 1984 list is $78.5 billion, double the 1983 figure. The tally of the 50 largest deals includes corporate stock and bond offerings and stock buybacks in the U.S., and acquisitions to which a U.S. corporation was a party.

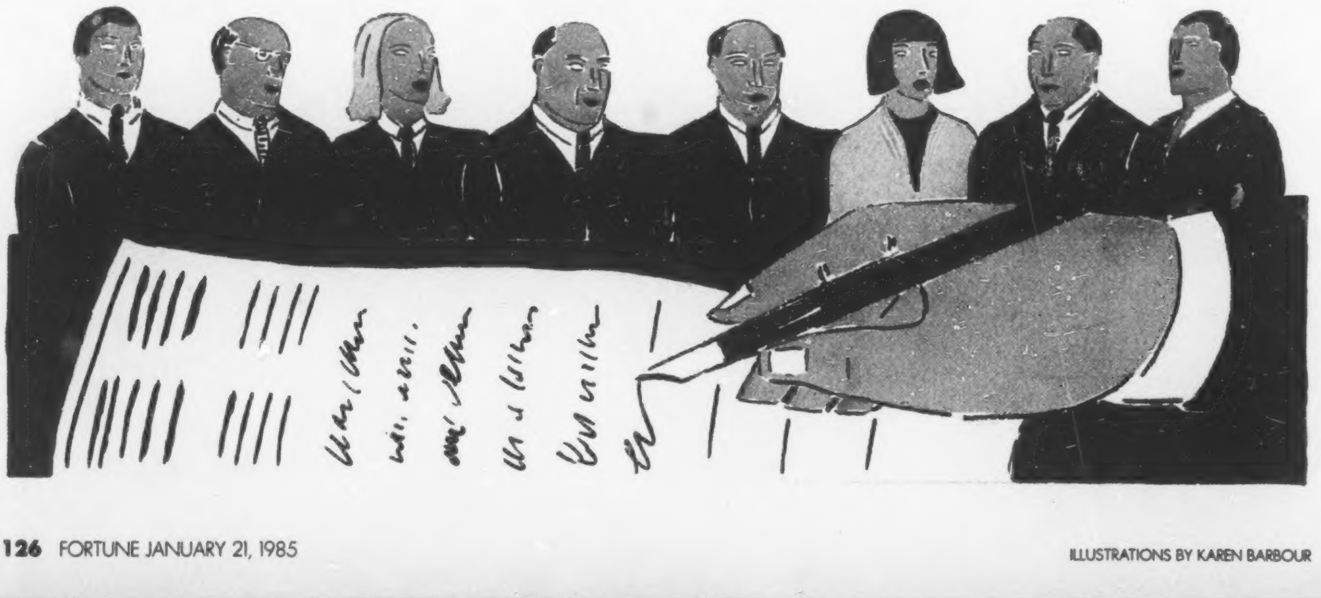
Like an oil spill too big to ignore, consolidations and financial restructurings in the petroleum industry dominated the 1984 list. With crude prices down and exploration still expensive, many of the big producers found it cheaper to buy reserves through acquisitions. In all, oil companies accounted for 11 of 1984's biggest deals and shelled out more than $36 billion.

The year also produced a record crop of leveraged buyouts, which are financed mainly with debt repaid from the acquired company's cash flow or the sale of its assets. In the largest buyout ever (Deal No. 15), Pace Industries, a new corporation formed by Kohlberg Kravis Roberts and Merrill Lynch Capital Markets, paid $1.2 billion for three subsidiaries of City Investing, which is selling off all its assets. Five other leveraged buyouts are on the list, including the purchase of Metromedia for $963 million by a management-led group (No. 32). Later in the year, Metromedia sold $1.3 billion of bonds, using most of the proceeds to pay off the lenders who financed the buyout (see following story). The issue included four separate offerings, none big enough to make the list.

All but four of last year's acquisition deals involved linkups within the same industry. The rare diversification moves, however, included two stunners in which blue-chip giants made their first acquisitions in years. General Motors bought Electronic Data Systems for $2.6 billion (No. 6), and IBM paid $1.3 billion for the 77% it didn't already own of Rolm, the telecommunications manufacturer (No. 14).

The investment bankers fared well. They garnered at least $367 million in fees for the 50 deals, up more than 40% from 1983. The Chevron-Gulf deal alone generated $64 million for the three financial intermediaries. Goldman Sachs culled the most in fees last year, more than $63 million. Morgan Stanley was second with $46 million.

As 1984 closed out, several large deals were pending. The protracted battle waged by Royal Dutch/Shell for the $5.5 billion of Shell Oil stock it didn't already own was simmering in the courts. Nestlé was preparing to consummate its proposed $3-billion acquisition of Carnation. More megamergers are on the way.



ILLUSTRATIONS BY KAREN BARBOUR

BIGGEST DEALS OF 1984

░ MERGERS AND ACQUISITIONS ▒ DEBT AND EQUITY OFFERINGS

Rank	Value of deal (000)	Percent of book value	Transaction	Companies	Financial intermediaries	Fee (000)	Fee as percent of deal
1	**CHEVRON (formerly Standard Oil of California) acquires GULF OIL**						
	$13,231,253	129.7%	Acquisition for cash, June 15	Chevron	Morgan Stanley	$16,900	.13%
				Gulf	Salomon Bros. Merrill Lynch	$28,235* $18,765	.21% .14%
2	**TEXACO acquires GETTY OIL**						
	$10,129,245	102.2%	Acquisition for cash, February 17	Texaco	First Boston	$10,750	.11%
				Getty	Goldman Sachs Kidder Peabody Salomon Bros.	$18,500 $15,500 N.A.	.19% .15% —
3	**MOBIL acquires SUPERIOR OIL**						
	$5,696,704	227%	Acquisition for cash and debentures, September 28	Mobil	Goldman Sachs	$1,742	.03%
				Superior	Morgan Stanley	$12,688	.22%
4	**BEATRICE COS. (food and consumer products) acquires ESMARK (food and consumer products)[1]**						
	$2,699,891	208.3%	Acquisition of 99% for cash, August 7	Beatrice	Lazard Frères	$4,500	.17%
				Esmark	Oppenheimer Salomon Bros.	$8,000 $7,500	.30% .28%
5	**KIEWIT-MURDOCK INVESTMENT CORP.[2] acquires CONTINENTAL GROUP (paper, forest products, insurance, and energy)**						
	$2,686,051	167.8%	Acquisition for cash and stock, November 1	Peter Kiewit Sons' Pacific Holding Corp.	None None	— —	— —
				Continental Group	Morgan Stanley Goldman Sachs	$5,400 $5,400	.20% .20%
6	**GENERAL MOTORS acquires ELECTRONIC DATA SYSTEMS**						
	$2,555,336	777.8%	Acquisition for cash, stock, and notes, October 19	General Motors	Salomon Bros.	N.A.	—
				Electronic Data Systems	Lazard Frères	$4,000	.16%
7	**BROKEN HILL PROPRIETARY (natural resources) acquires UTAH INTERNATIONAL (natural resources) from General Electric**						
	$2,400,000*	N.A.	Acquisition for cash, April 2	Broken Hill Proprietary	First Boston	N.A.	—
				General Electric	Morgan Stanley	N.A.	—
8	**CHAMPION INTERNATIONAL (paper and forest products) acquires ST. REGIS (forest products)**						
	$1,827,958	138%	Acquisition for cash and stock, November 20	Champion International	Goldman Sachs	$5,000	.27%
				St. Regis	Morgan Stanley	$6,400	.35%
9	**TELEDYNE (manufacturing and insurance) repurchases its common stock**						
	$1,732,211	151.7%	Cash tender for common stock, May 25	Teledyne	None	—	—
10	**MANUFACTURERS HANOVER (financial services) acquires CIT FINANCIAL from RCA**						
	$1,510,000	106.5%	Acquisition for cash, stock, and notes, April 30	Manufacturers Hanover	Goldman Sachs	N.A.	—
				RCA	Lazard Frères Lehman Bros.	$4,000 N.A.	.26% —
11	**FEDERAL NATIONAL MORTGAGE ASSOCIATION (mortgage holder) sells bonds**						
	$1,500,000		Offering of 12.25% debentures due 1987, April 10	Federal National Mortgage Association	Various dealers	$2,198	.15%
12	**PHILLIPS PETROLEUM acquires AMINOIL and GEYSERS GEOTHERMAL (energy) from R.J. Reynolds**						
	$1,300,000	246.2%	Acquisition for cash, October 26	Phillips Petroleum	Morgan Stanley	N.A.	—
				R.J. Reynolds	Dillon Read	N.A.	—
13	**DUN & BRADSTREET (communications and publishing) acquires A.C. NIELSEN (research services)**						
	$1,282,005	106.4%	Acquisition for stock, August 29	Dun & Bradstreet	Goldman Sachs	$3,500	.27%
				A.C. Nielsen	Lehman Bros.	$600	.05%
14	**INTERNATIONAL BUSINESS MACHINES acquires ROLM (telecommunications products)[3]**						
	$1,279,745	231.3%	Acquisition of 77% for 7.875% debentures due 2004, November 21	IBM	Salomon Bros.	$3,500	.27%
				Rolm	Goldman Sachs	$4,900	.38%

*Fortune estimate. N.A. Not available.

[1] Beatrice previously owned 1%.

[2] Acquiring firm 80% held by Peter Kiewit Sons', a construction, mining, and finance concern, and 20% by Pacific Holding, owned by David Murdock.

[3] IBM previously owned 23%.

BIGGEST DEALS OF 1984

Rank ▼	Value of deal (000) ▼	Percent of book value ▼	Transaction ▼	Companies ▼	Financial intermediaries ▼	Fee (000) ▼	Fee as percent of deal ▼
15	**PACE INDUSTRIES (new company)[4] acquires three subsidiaries[5] of CITY INVESTING**						
	$1,251,000	N.A.	Leveraged buyout for cash, December 13	Pace Industries	Merrill Lynch	$14,200[6]	1.13%
				City Investing	First Boston	$6,000	.48%
16	**AMERICAN GENERAL (insurance) acquires the insurance units of GULF UNITED**						
	$1,225,482	141.6%	Acquisition for stock, warrants, and cash, January 5	American General	First Boston	$1,200	.10%
				Gulf United	Lehman Bros. Smith Barney	$2,450 $900	.20% .07%
17	**FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds**						
	$1,200,000		Offering of 11.55% debentures due 1987, November 7	Federal National Mortgage Association	Various dealers	$1,800	.15%
18	**AMERICAN STORES (food and drug retailer) acquires JEWEL COS. (food and drug retailer)**						
	$1,184,961	187%	Acquisition for stock and cash, November 16	American Stores	Lehman Bros.	$4,000	.34%
				Jewel Cos.	Morgan Stanley	$4,300	.36%
19	**OCCIDENTAL PETROLEUM sells stock and notes**						
	$1,171,500		Offering of 9.65% notes due 1994 and stock, October 23	Occidental Petroleum	Drexel Burnham Lambert* First Boston Donaldson Lufkin & Jenrette Kidder Peabody Dean Witter	$28,500	2.43%
20	**GENERAL ELECTRIC FINANCIAL SERVICES (General Electric) acquires EMPLOYERS REINSURANCE from Texaco[7]**						
	$1,075,000	141.3%	Acquisition for cash, July 2	General Electric	None	–	–
				Texaco	Goldman Sachs	N.A.	–
21	**TEXAS EASTERN (oil and gas) acquires PETROLANE (oil and gas)[8]**						
	$1,025,600	235.8%	Acquisition of 98.1% for cash, September 26	Texas Eastern	First Boston	$5,500[9]	.54%
				Petrolane	First Boston	–	–
22	**FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds**						
	$1,000,000		Offering of 11.55% debentures due 1988, January 10	Federal National Mortgage Association	Various dealers	$1,680	.17%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 11.05% debentures due 1987, February 3	Federal National Mortgage Association	Various dealers	$1,410	.14%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 12.10% debentures due 1989, March 12	Federal National Mortgage Association	Various dealers	$1,950	.20%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 13.05% debentures due 1986, June 11	Federal National Mortgage Association	Various dealers	$1,143	.11%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 13.65% debentures due 1987, July 10	Federal National Mortgage Association	Various dealers	$1,440	.14%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 12.90% debentures due 1986, September 10	Federal National Mortgage Association	Various dealers	$1,175	.12%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 13.20% debentures due 1988, September 10	Federal National Mortgage Association	Various dealers	$1,645	.17%
	FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds						
	$1,000,000		Offering of 11.25% debentures due 1988, December 10	Federal National Mortgage Association	Various dealers	$1,638	.16%

*Lead manager. N.A. Not available.

[4] New corporation formed by Kohlberg Kravis Roberts and Merrill Lynch Capital Markets.

[5] Rheem Manufacturing (water heaters), World Color Press, and Uarco (printing).

[6] Includes fees for other services to City Investing prior to deal.

[7] Texaco had acquired Employers Reinsurance as part of Getty Oil.

[8] Texas Eastern previously owned 1.9%.

[9] First Boston advised both companies.

BIGGEST DEALS OF 1984

Rank	Value of deal (000)	Percent of book value	Transaction	Companies	Financial intermediaries	Fee (000)	Fee as percent of deal
30	**CHEVRON sells notes**						
	$992,770		Offering of 12.75% notes due 1987, August 4	Chevron	Salomon Bros. Dillon Read	$1,000† $1,000	.10% .10%
31	**SCHLUMBERGER (oil services and electronics) acquires SEDCO (oil services)**						
	$970,142	171.2%	Acquisition for cash and stock, December 24	Schlumberger	Lazard Frères	N.A.	—
				Sedco	Goldman Sachs	$1,500	.15%
32	**JWK ACQUISITION CORP. (private investors) acquires METROMEDIA (communications)**						
	$962,536	485.6%	Leveraged buyout for cash, warrants, and debentures, June 21	JWK Acquisition Corp.	Boston Ventures Management	$4,000	.42%
				Metromedia	Lehman Bros. Bear Stearns	$4,685 $2,500	.49% .26%
33	**ARA ACQUIRING CORP. (private investors) acquires ARA SERVICES (food, transportation, and health care)**						
	$883,287	150.5%	Leveraged buyout for cash, December 19	ARA Acquiring Corp.	Goldman Sachs	$10,000	1.13%
				ARA Services	Salomon Bros.	$1,250	.14%
34	**AMERICAN MEDICAL INTERNATIONAL (health care services) acquires LIFEMARK (health care services)**						
	$863,449	346.1%	Acquisition for stock, January 19	American Medical International	Goldman Sachs	$2,787	.32%
				Lifemark	First Boston	$3,588	.42%
35	**WOMETCO ENTERPRISES AQUISITION CORP. (private investors)[10] acquires WOMETCO ENTERPRISES (communications and bottling)**						
	$820,016	373.5%	Leveraged buyout for cash, April 12	Wometco Enterprises Aquisition	None	—	—
				Wometco	Kohlberg Kravis Roberts Drexel Burnham Lambert Merrill Lynch	$10,000 $3,900 $200	1.2% .48% .02%
36	**TEXACO acquires some European marketing and manufacturing operations of CHEVRON**						
	$800,000*	N.A.	Acquisition for cash, April 1	Texaco	None	—	—
				Chevron	None	—	—
37	**FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds**						
	$750,000		Offering of 13.125% debentures due 1989, August 6	Federal National Mortgage Association	Various dealers	$1,500	.20%
38	**AMERICAN EXPRESS (financial services) acquires INVESTORS DIVERSIFIED SERVICES (financial services) from Alleghany**						
	$743,875	188.1%	Acquisition for stock, cash, and a promissory note, January 12	American Express	Morgan Stanley S.B. Lewis	N.A. $3,500	— .47%
				Alleghany	First Boston	N.A.	—
39	**R.J. REYNOLDS repurchases its common stock**						
	$735,000	174.4%	Cash tender for common stock, November 21	R.J. Reynolds	Dillon Read	$1,500	.20%
40	**EQUITABLE LIFE ASSURANCE acquires shopping centers from GENERAL GROWTH PROPERTIES**						
	$707,795	N.A.	Acquisition for cash and assumption of mortgages, November 30	Equitable Life Assurance	None	—	—
				General Growth Properties	None	—	—
41	**GULF & WESTERN acquires PRENTICE-HALL (publishing)**						
	$705,322	319%	Acquisition for cash, December 21	Gulf & Western	Kidder Peabody	$3,500	.50%
				Prentice-Hall	Dillon Read	$875	.12%
42	**FEDERAL NATIONAL MORTGAGE ASSOCIATION sells bonds**						
	$700,000		Offering of 11.60% debentures due 1989, February 3	Federal National Mortgage Association	Various dealers	$1,320	.19%
43	**OCCIDENTAL PETROLEUM sells stock, warrants, and notes**						
	$682,500		Offering of 8.95% notes due 1994, warrants, and stock, April 17	Occidental Petroleum	Drexel Burnham Lambert† First Boston Donaldson Lufkin & Jenrette Goldman Sachs Kidder Peabody Dean Witter	$17,500	2.56%

*Fortune estimate. †Lead manager. N.A. Not available.
[10]Group led by Kohlberg Kravis Roberts.

BIGGEST DEALS OF 1984

Rank	Value of deal (000)	Percent of book value	Transaction	Companies	Financial intermediaries	Fee (000)	Fee as percent of deal
44	**A.H. BELO (publishing and broadcasting) acquires six television stations from DUN & BRADSTREET**						
	$606,000	N.A.	Acquisition for cash, February 29	A.H. Belo	None	–	–
				Dun & Bradstreet	Goldman Sachs	N.A.	–
45	**COASTAL CORP. (oil and gas) sells notes**						
	$585,000		Offering of 14.60% notes due 1994, August 9	Coastal	Drexel Burnham Lambert	$15,000	2.56%
46	**HH ACQUIRING CORP. (private investors) acquires HARTE-HANKS COMMUNICATIONS**						
	$575,932	225%*	Leverged buyout for cash and debentures, September 11	HH Acquiring Corp.	Salomon Bros.	$1,000	.17%
				Harte-Hanks Communications	Goldman Sachs	$9,000	1.56%
47	**PHILADELPHIA SAVING FUND SOCIETY acquires FAMILY FINANCIAL SERVICES from General Electric Credit Corp.**						
	$568,000	N.A.	Acquisition for cash, January 24	Philadelphia Saving Fund Society	Salomon Bros.	N.A.	–
				General Electric Credit Corp.	Goldman Sachs	N.A.	–
48	**IC INDUSTRIES (consumer and commercial products, transportation) acquires PNEUMO (aerospace, food and drug retailing)**						
	$562,300	268.4%	Acquisition for cash and stock, October 18	IC Industries	Salomon Bros.	$2,475	.44%
				Pneumo	Merrill Lynch	$3,674	.65%
49	**PITTCO ACQUISITION CORP. (private investors)** acquires MALONE & HYDE (food and retailing)**						
	$550,146	273.5%	Leveraged buyout for cash, August 29	Pittco Acquisition	Kohlberg Kravis Roberts	$6,750	1.22%
				Malone & Hyde	Lehman Bros. Kidder Peabody	$3,500 $750	.60% .13%
50	**BANK OF MONTREAL acquires HARRIS BANKCORP**						
	$546,734	132.6%	Acquisition for cash, September 4	Bank of Montreal	Morgan Stanley	N.A.	–
				Harris Bankcorp	First Boston	$1,516*	.28%

*Fortune estimate N.A. Not available.
**Group led by Kohlberg Kravis Roberts.

EXPLANATORY NOTES

Deals eligible for the list include:

1. U.S. public offerings of individual securities (except short-term securities) by domestic and foreign corporations issued under a single prospectus or offering circular.
2. Cash tender offers by domestic corporations or by foreign corporations tendering in the U.S., including those of companies buying in their own stock.
3. Mergers or acquisitions in which the buyer and/or seller is a U.S. company (or part of one). To be eligible, offerings must be effective in 1984, and tender offers must have expired during the year. Mergers and acquisitions are eligible if legally closed during the year or, when not legally closed, if the prospective buyer has paid a portion of the purchase price in cash during the year.

The list excludes short-term financings, government securities, and financings other than public offerings—such as bank borrowings and private placements.

When two companies merge through an exchange of stock to form a new company, the company whose stockholders received the largest share of the new company is treated as the buyer. When the buyer or seller is a subsidiary, the parent's name is given in parentheses.

Value of deal Amounts for cash offerings are the total amounts raised, for tenders the total amount paid. All securities issued in acquisitions or mergers are valued at the market price on the date of closing. Exception: when a new company is formed by merger, only those shares issued to stockholders of the smaller company are valued.

Percent of book value Book value calculations indicate the price paid (or amount of equity capital raised) per share as a percentage of the shareholders' equity per share of the acquired company (or issuer) at the end of the last quarter preceding the transaction.

Transaction Dates under this heading are effective dates for offerings, expiration dates for tenders, and closing dates for acquisitions and mergers.

Financial intermediaries For underwritten public offerings, the co-managers are listed and the lead manager is indicated by an asterisk. In the case of acquisitions and mergers, the intermediaries are typically investment banking firms that assisted in the transaction.

Fee The figures represent the amounts charged by the financial intermediaries assisting in the deals. In underwritings, part of the fee is paid to other members of the underwriting syndicate or to dealers other than the co-managers. ■

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FORTUNE

THE CARD FIGHT

CITICORP ON THE ATTACK

DINERS CLUB INTERNATIONAL
3012 345678 0009
AMERICAN EXPRESS
VISA
SB SUPERIOR
The Citicorp Card
CHOICE

PROCTER & GAMBLE'S COMEBACK PLAN

HOW TO SELL BY LISTENING

THE BOOM IN DATABASES FOR PCs

FEBRUARY 4, 1985

VOL. 111, NO. 3

FORTUNE
Competition

FORTUNE
THE CARD FIGHT

Michael Bartallos's cover illustration, incorporating photos by Roberto Brosan, depicts the U.S. consumer card melee reported on page 18.

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FORTUNE

MONEY & MARKETS/COVER STORY

THE GREAT PLASTIC

A lot of corporations think the key to the financial future is made of plastic, and Citicorp is attacking fellow giants in a big-money battle to find it. Cards may not be as powerful as some think, but they sure can be profitable.

■ *by Monci Jo Williams*

REMEMBER the fellow in *The Graduate* who whispered to Dustin Hoffman that plastic was the wave of the future? Corporate planners have bought the idea. Some giant American companies are betting that plastic, the kind people carry in their wallets, is about to become the ultimate strategic weapon. The biggest believer appears to be John Reed, 45, who became chief executive of Citicorp last September.

Reed has a full arsenal of cards at his disposal and, according to card-industry tracker Spencer Nilson, probably spent $150 million to $200 million last year to promote them. Some of the money went into nationwide marketing of MasterCard and Visa, both owned by bank cooperatives and also issued by thousands of other U.S. banks. But Citicorp really shelled it out for some of the proprietary cards in its silos. These include such familiar names as Diners Club and Carte Blanche—used mostly for travel and in restaurants—and a new advanced weapon, the Choice card, that is already held by a million Americans. Though little known outside states where the card is marketed—and Citi's home state of New York isn't one of them—Choice has the competition's radar blipping.

Reed's moves are part of his strategy to make Citi the first and foremost nationwide bank. Other card players have different goals, but all are trying to figure ways to reach the right consumers or investors, to persuade them to use their cards to do more things, or to cross-sell other products or services. Banks and nonbanks are doling out money for hardware and software so they can defend their positions, or advance them, as the nation moves to electronically based payment systems. The upshot is that plastic is about to become a battleground in a fight for turf.

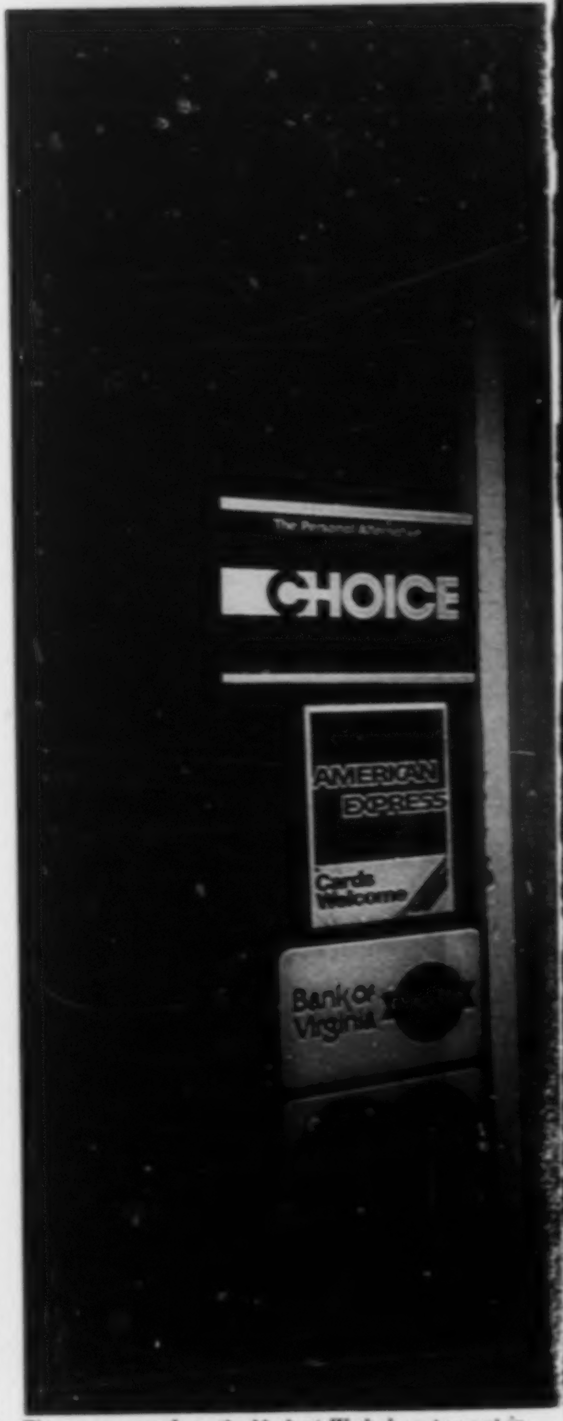
Plastic may not prove as powerful as Reed and others hope, but it can be immensely profitable. At the moment, credit cards are a bright spot for beleaguered banks. Banks charge annual interest rates of anywhere from 13% to 22% for unpaid balances on Visa and MasterCards they issue—vs. 10.75% on loans made at the prime rate—plus an average annual fee of $17 per card. Banks also do a nice business processing credit transactions for merchants, traditionally those near their home turf, usually raking off 2% to 3.5% of total charges; they typically pass along 1.5 percentage points to the bank that issued the card.

American Express gets most of its card revenues by processing every single American Express receipt itself, a paperwork feat for which it charges merchants 3% to 5% of billings. Its annual card fees—$35 for the green card, $65 for the gold—comfortably exceed $650 million. Rodney Schwartz, a security analyst at PaineWebber, estimates that American Express netted $252 million from the card business in 1984, 42% of total corporate profits.

WITH 15 MILLION U.S. cardholders, American Express virtually owns the so-called travel and entertainment market. But it frets about Citi, which is spending heavily to steal business for Diners Club, and about some other powerhouses that are experimenting with card tricks. Among these is Sears Roebuck, with 60 million cards. How long, the card watchers wonder, will Sears be content to let its cards languish out there, underutilized, equipped only to make a Sears purchase? How long before Sears develops a multiple warhead?

Sears won't comment about its plans, nor will Citicorp. But it is a safe bet that none of the cardplayers feel secure. The sheer might of the competition is not the only worry. Deregulation of banking is sure to make doing business tougher; any company with lots of

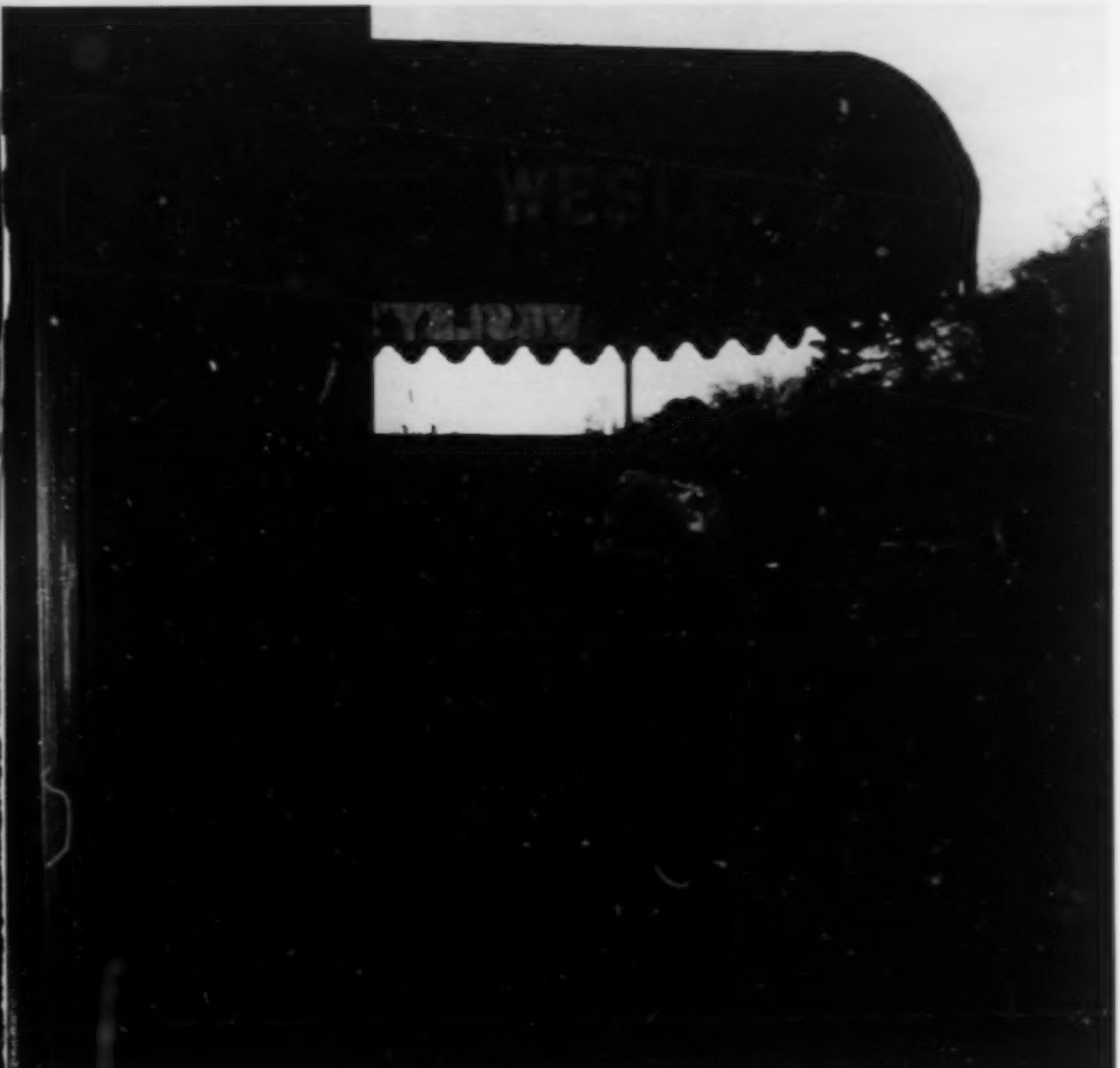
RESEARCH ASSOCIATE *David Kirkpatrick*



The new card *on the block at Wesley's restaurant in*

PHOTOGRAPH BY BILL BALLENBERG

CARD FIGHT BEGINS



Virginia Beach, Virginia, is Citicorp's Choice. Citi now offers it in just a few states, but plans to go nationwide.

cardholders and processing power is a potential threat; and technology could dramatically alter the way payments are made. Banks are promoters of debit cards, but they have mixed feelings about the trend toward electronic debiting in retail stores—paying for purchases with almost instantaneous withdrawals from bank accounts (see box). As a system of payment, bankers prefer debit cards to checks, which are generally unprofitable to process. But what if debit cards begin to take the place of credit cards? This not only would threaten those profitable credit card loans, it would reduce what merchants pay banks for processing card purchases. In fact, a couple of pioneering retailers, Mobil Oil and Publix Super Markets in Florida, have invested in the hardware and software necessary to accept debit cards and, for providing the systems, are *charging some banks to make the transactions.*

With fast-moving technologies and deregulation blurring everybody's vision of the financial future, practically any articulate seer's scenarios seem plausible. Not to react seems unthinkable, so all the participants are doing something, often at great cost. It may be decades before the corporate winners are known, but in the meantime the battle should benefit every card-carrying consumer.

REED is counting on his portfolio of plastic to establish a strong national consumer franchise for Citicorp. The plan is to place millions of cards bearing Citi's name in the hands of consumers all over the U.S. and then to cross-sell those cardholders mortgages, student loans, credit life insurance, and maybe even stocks and bonds. More important, Reed also aims to attract deposits this way, particularly CDs and money market accounts, by offering attractive rates or services. In short, Reed will use cards to help him make an end run around federal restrictions on interstate banking—by setting up a national banking network through the mail.

INVESTOR'S SNAPSHOT

CITICORP

ASSETS (AS OF 9/30/84)	**$144.7 BILLION**
CHANGE FROM YEAR EARLIER	UP 11%
NET PROFIT (LATEST FOUR QUARTERS)	**$830.0 MILLION**
CHANGE	DOWN 3%
RETURN ON COMMON STOCKHOLDERS' EQUITY	**14%**
FIVE-YEAR AVERAGE	14%
RECENT SHARE PRICE	**$37.50**
PRICE/EARNINGS MULTIPLE	**6**
TOTAL RETURN TO INVESTORS (12 MONTHS TO 12/31/84)	**11%**
PRINCIPAL MARKET	**NYSE**

Explanatory notes: page 126

J. ROSS BAUGHMAN—VISIONS

Citi's John Reed *has an arsenal of cards.*

To attract rich customers, Citi has been spending much of its money lately promoting "prestige" cards. It has embarked on a huge campaign to issue Visa's Premier card, which Citibank calls Preferred Visa. And in the last two years Citi has poured at least $70 million into Diners Club, a weakling in the travel and entertainment (T&E) market when it was acquired in 1981 and probably still a money loser in the U.S. The push to resuscitate the card began in earnest in 1983, directed by Richard S. Braddock, 43, Citicorp's top card executive. Until he joined the bank in the mid-1970s, Braddock had been a marketing man at General Foods, but Diners is not a piece of cake.

Citicorp's first task is to unsell consumers on the American Express card, which got its grip on the T&E market by convincing people that they can't leave home without it. Citi may have underestimated the difficulty of building up a base of cardholders and establishments willing to accept the card. It's a slow, expensive, brick-by-brick sort of task: consumers don't want a card if it isn't widely accepted by merchants, and merchants don't want to bother accepting a card that doesn't bring with it a lot of affluent card carriers. Though Diners is outnumbered two million to 15 million by American Express in the U.S., the numbers look better abroad, where Diners has three million cardholders to American Express's five million. Until recently the Diners operations outside the U.S. were owned by franchisees, a different one in each country. For the last couple of years Citicorp has been busily buying those franchises. But almost nobody thinks Diners can catch American Express.

Citi's solution to the almost Sisyphean task at hand has been to buy its way in the market, using every marketing trick in the book. Last year Citi began a direct-mail blitz for Diners, soliciting thousands of "preferred customers"—business travelers whose names Citi probably bought from the rosters of airline frequent-flier programs. "Frankly, Citicorp Diner's Club wants your business, and we're willing to work for it!" the mailer began. But preferred customers who read on found that Citi wasn't just willing to work for their business, it was willing to pay for it. Citi offered all sorts of lavish incentives along with the card, among them a credit toward the first $25 in charges, free Citicorp traveler's checks, and a round-trip ticket on American Airlines to anywhere in the U.S., including Hawaii, or to the Virgin Islands, for a mere $175.

Those kinds of incentives have doubtless produced results, though one wonders what will happen if the incentives are no longer offered when the card comes up for renewal at $45 a year, $10 more than American Express's green. Citi hopes to pick up cardholders faster by going after corporate customers, who would furnish Diners cards to their executives in bulk. Citi kicked off its ad campaign last year using the tag line "Citi-

INVESTOR'S SNAPSHOT

AMERICAN EXPRESS

ASSETS (AS OF 9/30/84)	**$62.8 BILLION**
CHANGE FROM YEAR EARLIER	UP 69%
NET PROFIT (LATEST FOUR QUARTERS)	**$418.0 MILLION**
CHANGE	DOWN 40%
RETURN ON COMMON STOCKHOLDERS' EQUITY	**10%**
FIVE-YEAR AVERAGE	18%
RECENT SHARE PRICE	**$36**
PRICE/EARNINGS MULTIPLE	**19**
TOTAL RETURN TO INVESTORS (12 MONTHS TO 12/31/84)	**20%**
PRINCIPAL MARKET	**NYSE**

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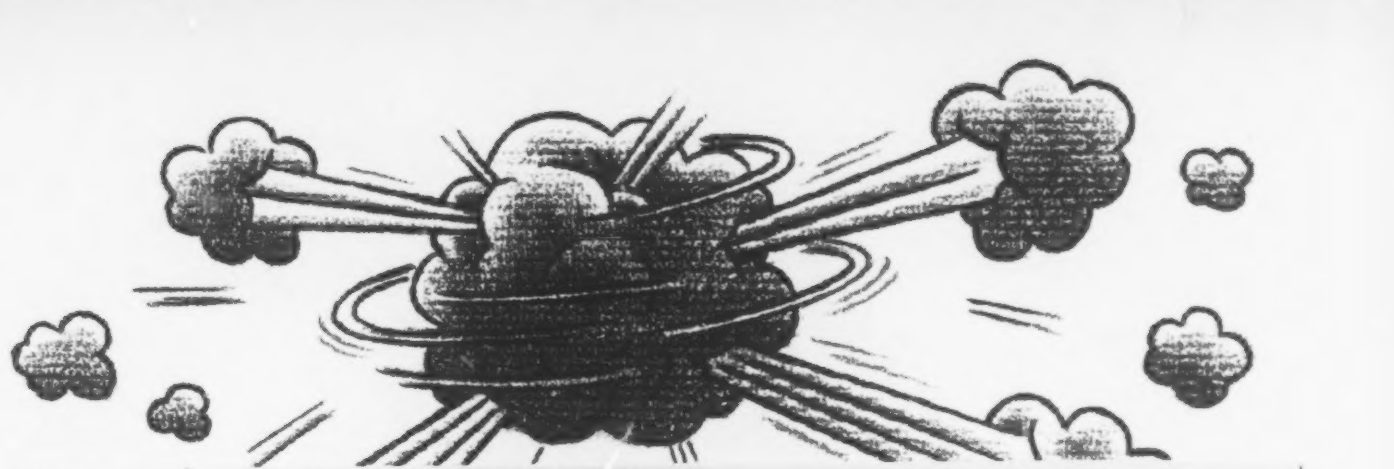

CARD	ISSUED IN THE U.S.	BILLINGS ON CARD IN 1984 in billions*	COMMENTS
VISA	77,200,000	$60.6	Issued by banks. Banks issuing 25 million cards participate in Visa's automated teller network enabling cardholders to get cash at 1,564 machines in 25 states. A few banks also issue Visa Electron debit cards, which can be used at ATMs and to pay for purchases at 25 test retail locations by debiting the holder's bank account.
MASTERCARD	60,000,000	$49.7	Issued by banks. Nine million cardholders can get cash at 3,000 ATMs in 28 states. A new card for electronic debiting at supermarkets and gas stations will be announced in February.
AMERICAN EXPRESS	15,000,000	$36.6	Three million cardholders participating in the Express Cash system can withdraw cash from their checking accounts at 2,000 ATMs in 31 states.
SEARS	60,000,000	$13.6	Usable only to charge purchases from Sears Roebuck.
Issued by CITICORP			Diners and Carte Blanche are wholly owned by Citicorp. Choice is a combination credit/debit card owned by Citicorp and issued primarily in Maryland, Virginia, the District of Columbia, and Colorado. Cardholders use it to make payments either from their credit line or from bank deposits. Citibank participates in networks across the U.S. that enable holders of Choice to get cash at over 1,000 ATMs.
Visa & MasterCard	6,000,000	$ 6.8	
Diners Club	2,200,000	$ 4.9	
Carte Blanche	300,000	$ .4	
Choice	1,000,000	$ .7	

*Estimated by the *Nilson Report* newsletter.

ILLUSTRATION BY MICHAEL BARTALOS

Players in the High-Stakes Card Game

Though there are more Visa cards in Americans' wallets than any other brand, Sears Roebuck is the biggest single card issuer. MasterCards and Visa cards are issued by thousands of U.S. banks, including Citicorp, which is heavily promoting competing cards of its own.

corp Diners Club . . . when you mean business." The ads and TV spots featured four companies that used Diners as their corporate T&E card. Top officers of two of them—United Technologies and Corning Glass Works—are directors of Citicorp.

THE CORPORATE MARKET is also the segment that American Express has been planning to cultivate next, and the clash promises to be lively. American Express has surprised everyone, including American Express, with its success at expanding its cardholder base in other areas. The man who deserves most of the credit is Louis V. Gerstner, 42, chairman of the executive committee at American Express and head of the subsidiary that operates the card and travel services.

When Gerstner arrived in 1978 from McKinsey & Co., the management consulting firm, security analysts were saying that American Express's card business had reached maturity. The cards, they reasoned, were already in the hands of practically all the traveling executives who needed them, and they were accepted by most airlines, car-rental companies, hotels, and good restaurants. Since then, Gerstner has managed to keep earnings in the card business growing at an annual average rate of 25%, compounded. He discovered women, raising the proportion of female card members to 29% of the total from 16% four years ago, and he began adding graduating college students to the card-member base. He also went after retail stores, not previously hustled, and got merchants from Saks Fifth Avenue to the Gap to accept the card.

The trade-off for taking on new groups of cardholders was that the green card lost some of the cachet that went with a more exclusive approach. Gerstner, who believes that snob appeal sells, pushed the gold card hard to hold customers who otherwise might have been lured away by the Visa Premier card or MasterCard's gold model. Last year he introduced the platinum card, available only to people who have charged more than $10,000 on their American Express cards in the past year. So far it turns out that 50,000 of these big spenders are willing to fork over $250 to carry plastic platinum.

Gerstner is just beginning his push into the corporate market. The company has sold only about two million corporate cards, most of them to small businesses. Now American

Express is aiming at large corporate accounts among the FORTUNE 500. Gerstner thinks the corporate segment could grow by more than 50% a year, and he doesn't intend to share that growth with Citicorp or anyone else.

JERRY C. WELSH, a former head of card marketing and now in charge of worldwide marketing and communications for Gerstner's subsidiary, claims that American Express will "clean Citibank's clock" in the corporate card segment with a product called Travel Management Service, or TMS. The product is an integrated package of corporate services wrapped around the basic American Express card. The services include analyzing travel and entertainment costs by division, consulting with companies about travel policies, and actually operating as the travel department for companies that don't have their own. Gerstner's pitch is that TMS will help U.S. corporations control the $80 billion or so they spend on travel and entertainment for employees each year.

While Citicorp tangles with American Express in the corporate market, it is already well along in an experiment with the Choice card to find out whether it can collect deposits by mail. Back in 1977, when Reed was head of Citi's fledgling retail banking unit, Citicorp bought NAC, a small Baltimore-area charge card, and renamed it Choice. The bank did little with the card until 1980, when it reintroduced Choice in Baltimore. Now Choice is distributed mainly in the Baltimore-Washington area and in Colorado. The million cardholders have 60,000 places to use the card.

Last year Choice customers charged an estimated $700 million on their cards. Though that is small potatoes in the card game (see table), Choice has performed impressively in the Baltimore-Washington area, where the test began. Ronald E. Geesey, president of the Citicorp subsidiary that markets the card, told a group of security analysts last year that in 1983 Choice accounted for more than 25% of sales by "major retailers" in that market—more than American Express (16%) and MasterCard (23%) and just a nose behind Visa (28%). As it has with Diners Club, Citi has equipped the card with all sorts of appealing features to get it into consumers' hands and to get them to use it. Cardholders receive Choice and an accompanying credit line of $750 to $5,000 without paying an annual fee, and are promised a rebate of 0.5% on all Choice purchases above the first $600 in any 12-month period. To find out whether consumers would hand over deposits through the mail, Citi has outfitted Choice with several interest-paying accounts. For deposits larger than $1,000, Choice was recently paying 10%, more than a point above prevailing money market rates. Cardholders who overpay their bills by less than $1,000 get 5.25%.

American Express

GEORGE LANGE

Card boss Louis Gerstner *of American Express is doing battle with Diners Club.*

When Choice moved to Denver in 1983, it found an ideal test market. Colorado allows out-of-state bank holding companies to open limited-service banks that can collect consumer deposits, and it also requires banks in automated teller networks to share their terminals with other state banks. So in Colorado, through Citicorp Industrial Bank, Choice cardholders can get cash and make deposits at hundreds of ATMs around the state.

It's hard to get a fix on how much Citi has collected in deposits from Choice customers, since the bank isn't talking. But Citi must be encouraged by Choice's early returns. Last spring Geesey told the analysts that Choice had "a great future," adding that if the results of the Baltimore test could be duplicated nationwide, "we are talking about tens of millions of cardholders." Several months later, after it successfully petitioned Maryland legislators to pass a bill allowing out-of-state bank holding companies to set up shop in their state, Citicorp opened a Maryland banking subsidiary. Its purpose, Citi told shareholders last November, is to provide a launching pad from which "to market our Choice card nationwide . . . through mail and telephone marketing." Perhaps in anticipation of the rollout, Citi has recently signed up ATM networks in several states—including Florida, Texas, and California—at which Choice cardholders can get cash.

Citicorp was able to expand Choice's merchant base from Maryland and Washington, D.C., through Delaware, Virginia, North Carolina, and southern Pennsylvania by using the economies of scale in its huge credit card processing operations. To get into Virginia, Citi started a price war. Through what it called a "tri-card plan," it offered to process merchants' credit slips for Visa, MasterCard, and Choice for about half a percentage point below the approximately 3% charged by banks in the area. Randolph Wyckoff, a senior vice president in charge of credit cards at the Bank of Virginia, says he lost plenty of processing business to Citicorp. In fact, says Wyckoff, "they kicked our ass all over the block."

To protect the business he had left, Wyckoff went to Citicorp and offered to sell the Choice card to the merchants whose Visa and MasterCard slips he processed. Citi agreed, and the United Virginia Bank and Central Fidelity, two other Richmond-based banks, soon struck similar deals.

THERE WAS some growling from other banks in the state, since nobody in Virginia has much appreciation for Yankee invasions. "Sure they asked me, 'Why'd you let 'em in?' " drawls Wyckoff. "But what else are you gonna do? You can try to hold the door as long as you can—and then when it opens, it squashes you. Or you can try to find an advantage."

More companies may soon be trying to beat down the door. If Citi can make headway across the U.S. in spite of regulations that make it hard to leave the state, why can't big retailers with cross-country electronic networks for authorizing and processing credit purchases launch their own all-purpose credit cards? And for that matter, if the retailers happen to own banks or savings banks—as Sears does in California and both Sears and J.C. Penney do in Delaware—why can't they collect deposits the same way Citi hopes to?

Bankers say that Sears is testing the idea of an all-purpose credit/debit card like Choice that could be used at automated teller machines. And Sears is also looking for ways to link its card to its securities subsidiary, Dean Witter. In San Diego, Sears is experimenting with a card that gives some customers of Dean Witter and Sears Savings Bank access to cash at automated teller machines throughout California.

BANKERS and others take comfort from the thought that Sears would have trouble launching a nationwide credit card because other retailers would resist accepting a competitor's plastic. But Sears has been working on a deal with a noncompeting retailer, Phillips Petroleum. In a test, Phillips has been using Sears' sophisticated electronic network to check the credit of customers using cards and to process credit purchases. Penney has been marketing its electronic network through a subsidiary set up in 1983 called J.C. Penney Systems Services. Among its customers are Shell Oil and Gulf Oil, which pay Penney 10 cents to 13 cents per transaction to do what Sears is doing for Phillips. Late last year Penney even signed up a bank in Utah, which uses Penney's network to transmit data for its own bank-card operations. And just to scramble your senses, a 75%-owned subsidiary of American Express, called First Data Resources, thinks it is the largest nonbank processor of Visa and MasterCard transactions in the U.S. The possible permutations suggested by all this, combined with the prospect of electronic debiting at the cash register, justify bankers' fears that nonbanks may wrest control of the payment systems.

Before the technology gets sorted out, and before Reed's great experiments prove anything, consumers must cast their votes. Do they really want a card that can zap their bank account to pay for things? Can deposits be coaxed from them, by mail or any other way, or will they coolly shop for the best rate? Do they like the idea of one-stop financial services, or is that just a planner's dream? Will corporations buy charge cards? Will people come to favor some new brand of card over the ones we already have? Strategists can only guess at the answers, but there will be winners among those who are willing to place their bets before all the answers are clear. ■

DEBIT CARDS GO SHOPPING

BUD LEE

A PIN number *identifies a shopper using a debit card at a Florida beachwear store.*

■ If you are laboring under the impression that you have never seen a debit card, take a look at the piece of plastic that goes in your bank's automated teller machines. It's a debit card, meaning it can electronically siphon money out of your bank account. It could do that at electronic terminals thousands of miles from your bank's ATMs if the terminals existed and if your bank was linked to them. Some do exist, and more are on the way. Many of the 60,000 ATMs around the U.S. are linked into statewide, regional, or national networks owned by groups of banks.

Having invested a bundle on hardware and software, the bank-owned networks need to handle more transactions to make electronic debiting profitable. The easiest way, and one the banks are pushing, is to put terminals into stores where ATM cards could be used at the cash register to debit bank accounts of participating banks. So-called point-of-sale debiting has been slow arriving, but it has won some fans outside banking.

Merchants generally approve of debit cards. Retailers get their money almost immediately when a purchase is made, and since it goes to their bank account rather than their cash registers, it is holdup-proof. Some say debit cards are the fastest way to buy things, but others are skeptical because purchasers have to verify their identity, usually by punching a personal identification number (PIN) onto a "PIN pad." Retailers will almost certainly spend less to have debit card transactions processed than they now pay banks to process credit cards and checks.

In a turn of the tables, Publix, an innovative $3-billion-a-year Florida supermarket chain, is charging banks to make transactions. Publix invested $11 million of its own money to install 314 automated teller machines in its stores, and will invest another $9 million to wire its checkout lanes with point-of-sale terminals by the end of the year. For providing the systems, it charges banks 40 cents on ATM withdrawals and will take 15 cents for each point-of-sale transaction. Also, Publix estimates it saved about $750,000 in check-processing costs—which run about 20 cents to 30 cents per check.

But do consumers need a new way to pay? Why not keep their money at work earning interest while their checks lumber through the cumbersome settlement process, or wait until the interest meter starts ticking to pay for credit purchases?

Mobil, which has also built a point-of-sale debit system, found an inducement: it offers debit card purchasers the same 4-cents-a-gallon discount it gives for cash. By far the largest point-of-sale operation in the country, Mobil has 1,000 terminals at high-volume gas stations, and it plans to more than double the number this year.

Walter D. Manz, a Mobil marketing manager, believes that Mobil stations may handle half the debit transactions conducted daily in the U.S. Even so, the number is well below Mobil's projections. "There is a big consumer education effort involved in starting up a new payment mechanism," says Manz. Mobil kicked off its debit network with promotions that included radio commercials, newspaper ads, and direct-mail inserts with discount coupons worth $1 and $2 on debit purchases. Manz says that offering a new way of paying brought new customers into the station.

Presumably they were people who liked discounts but didn't have cash. There could be lots more like that.

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AMERICA'S NEW ABSTINENCE

SELLING TO THE LIGHT-DRINKING, LIGHT-SMOKING, LOW-CAL GENERATION

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CRAY'S SEARCH FOR THE SUPER-DUPER COMPUTER

WHO'S WINNING IN THE OPTIONS BOOM

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AMERICA'S NEW ABSTINENCE

The light-drinking, light-smoking, low-cal generation is bad news for some big businesses. But the trend isn't monolithic, and no two industries face the same challenges. Smart marketing executives are finding that even fitness fiends respond to a skillful spiel. ■*by Stratford P. Sherman*

LED BY maturing baby-boomers and fitness fiends, Americans are breakfasting on less bacon and fewer eggs, forgoing the lunchtime Scotch, and seeing a lot more sparkling water and chicken breasts at dinnertime. The new abstinence has touched the lives of so many people that it is creating havoc in some very large industries. For marketers of products spurned, or favored, by increasingly health-conscious Americans, abstinence is either a problem of historic proportions or a magnificent opportunity.

The trend isn't monolithic, or in some cases even rational. Fitness is certainly in fashion, but so once were Beatle wigs and contempt for material possessions. No two industries face the same challenges and opportunities. Concerns about cholesterol and obesity, for example, have apparently induced consumers to eat fewer eggs and to swill diet soda by the vatful. Yet the candy business is booming, and sales of cheese, a product notably high in fat and cholesterol, are going through the roof. After all, eating Brie with the rind sliced off is among the most essential tokens of yuppiedom.

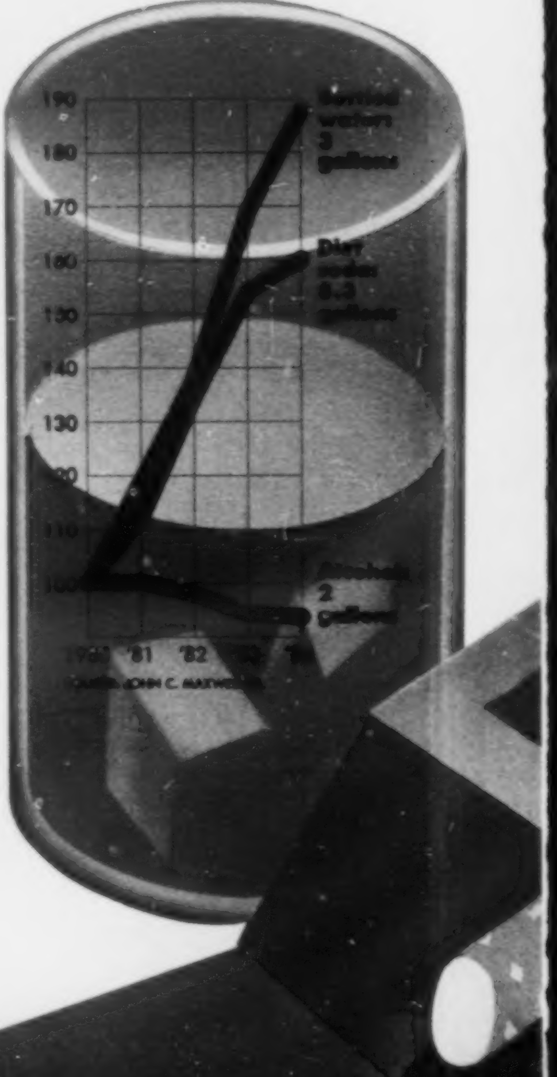
When it strikes, the new abstinence can prematurely force some hitherto growing markets to behave like mature ones. Consumers suddenly cut back, an industry's growth slows or stops, and companies find themselves scrambling for market share. This is a game in which the big players often do best because they have the financial resources and the marketing clout to reach out to narrower segments of the market. In cigarettes, beer, and a host of other industries, more of the sales dollar is going to product development, packaging and promotion of new brands, and advertising. Yet the same strategies don't work for all embattled products. Philip Morris, for example, is succeeding in cigarettes and flunking in beer and soft drinks (see following story).

One haven of growth in some suffering industries is the high-priced end of the market. Savvy marketers recognize that the yuppies who are leading the fitness trend are also often status-conscious and predisposed to buy top-of-the-line products. While beer sales are declining, the pricey and prestigious imported brands are growing 10% a year. Distilled spirits are in a nose dive, yet specialty items like Maker's Mark bourbon—$11 a bottle—are thriving. In the face of chronically falling cigarette consumption, R.J. Reynolds is testing Ritz, a "designer" brand supposedly fashioned by Yves Saint Laurent, at premium prices. The chief drawback of the prestige niche is that it's too small to ensure growth for the major industries affected by the new abstinence.

A more common way in which distressed companies are fighting back at declining consumption is with the venerable technique of changing their spiels. The product may be the same as always, but now consumers are told—perhaps to their surprise—that it fits right in with their new health-conscious lifestyles. Recognizing that people worry about pork's fat content, for example, the National Pork Producers Council spent $2 million last year pitching the idea that "America, you're leaning on pork." The Beef Association spent $5 million selling the notion that "beef gives strength," while the American Dairy Association finances several campaigns emphasizing the theme of natural goodness and health and is urging dairies to put a "REAL" symbol on their product packages.

Individual companies are up to the same thing. Campbell Soup is becoming a world-

RESEARCH ASSOCIATE *Brian Dumaine*



Alcohol Is Out, Water Is In

Americans may not be eating and drinking less, but they aren't consuming the way they used to. They crave more chicken, for example, and less pork. Bottled-water imbibing is extremely stylish. They're consuming more wine but less liquor and beer. The net effect: consumption of alcohol is down. Most of sugar's plunge results from a shift to corn sweeteners, cheaper than sugar, in soft drinks. Cigarette consumption of 6.1 pounds per adult in 1984 equals about a daily pack and a half for smokers.

ANNUAL CONSUMPTION PER PERSON: CHANGES, 1980–84 (INDEX: 1980–100), AND QUANTITIES CONSUMED IN 1984

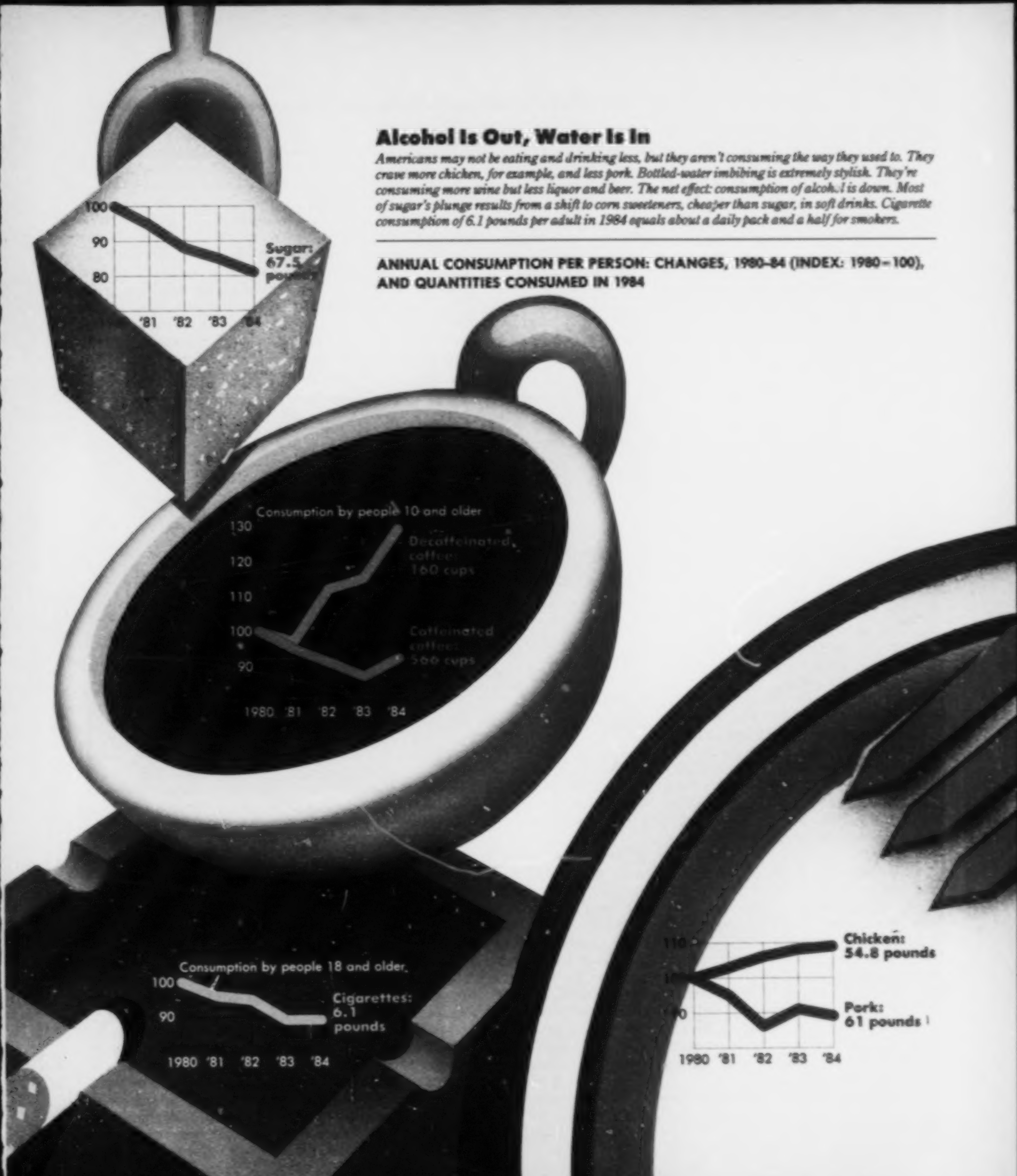


ILLUSTRATION BY ROBERT RISKO

class expert at exploiting consumers' misapprehensions about nutrition, and sales, after years of moderate growth, are now expanding by 12.5% a year. Chief Executive R. Gordon McGovern showed the way by repositioning once stodgy Campbell as a youth-oriented "fitness company." Now print ads for its Swanson's beef and chicken broths, for example, tout "full flavor, few calories, and no caffeine," while showing the body of a slim, scrumptious, and scantily clad young woman. The product sounds great—and of course the ad never mentions that the soup also contains a good deal of sodium, associated with high blood pressure.

Distillers are accentuating the positive too. While alcohol consumption is down overall, wine consumption has risen, and distilled spirits have been the biggest losers. Market research led Bacardi Imports, distributor of Bacardi rum, the best-selling liquor in the U.S., to attribute much of that shift to a misconception: that people can reduce their alcohol intake simply by eschewing the hard stuff. So Bacardi is spending $3 million, 30% of its ad budget, on ads like the one explaining that a rum and orange juice contains no more calories—and less alcohol—than a five-ounce glass of white wine. It may seem odd to claim that a product doesn't contain very much of the thing people used to buy it for, but for liquor marketers today, anything is worth trying.

JUST SENDING UP SMOKE isn't enough for the cigarette business. No other great industry is likely to suffer as much from the new abstinence. Sales at wholesale are $19 billion a year, yet the industry has been so hard hit that even Gerald H. Long, president of R.J. Reynolds Tobacco Co., concedes it is likely to die within a century or two.

Since 1964, when the U.S. Surgeon General first declared smoking hazardous, per capita consumption has plummeted 39%. Even more ominous for the industry's future is the three-point drop over the last decade in smokers as a proportion of the population, 28% last year and still falling. Cigarette makers must fight for a bigger share of this slow-growth business. The result is a proliferation of heavily promoted line extensions of existing brands—new flavors and sizes, for example—and new brands targeted at smaller market segments.

Reduced-tar cigarettes, which boomed in the Seventies, now account for 53% of all cigarettes sold in the U.S. Recently, however, the popularity of the low-tar brands has begun to wane—along with the belief that these less flavorful smokes are also less deadly. Studies show that many smokers of low-tar brands dramatically increase their cigarette consumption, gaining little as a result. As consumers consider this, some figure they may as well go back to smoking higher-tar brands, which taste better. Now cigarette makers are seeking new ways to grow. Liggett & Myers has found one path: it's the top seller of cut-price cigarettes for smokers concerned about price. Other makers are targeting young women—one of the few demographic groups in which smoking is on the rise.

Restrictions on smoking *are spreading, but workers at Campbell Soup in Camden, New Jersey, have long had to leave their desks to light up. No one knows the productivity cost of such rules.*

The liquor industry is under siege not only in the marketplace but also in legislatures. Not since Prohibition have such tough liquor laws been passed—over 360, mainly drunk-driving laws, since 1981. In a deficit-cutting step supported by the new temperance movement, federal excise taxes on hard liquor are due to increase 19% in October. Federal, state, and local taxes already account for 44% of the average retail price of a fifth of liquor, and John C. Maxwell Jr., publisher of the *Maxwell Report* newsletter, estimates the increase will dampen industry sales by 5%. In response to the anti-drunk-driving movement, a federal law will reduce highway funds to any state whose legal drinking age remains below 21 by October 1986. If all states opt for the higher age, says Steve Barsby, a liquor industry consultant, the revenue loss for beer makers alone could amount to $82 million a year. Grouses Edgar Bronfman Jr., 29, president of the House of Seagram, the arm of Joseph E. Seagram & Sons that markets spirits in the U.S.: "The *drinking* age is what they should raise to 21."

So called dram-shop laws, which hold bars, package stores, and restaurants liable for serving drinks to people who then crash their cars while intoxicated, have already spread to 23 states. In New Jersey that liability was extended last year even to private individuals. As a result of this and a police crackdown on drunk driving, liquor sales in New Jersey dropped 4% during the peak selling season of November and December last year. To combat critics, the distillers have fashioned a sensible policy of political damage control. Soon after drunk driving captured public attention in 1980, distillers decided to make the issue their own. Liquor companies spent $50 million on moderation messages last year, up from $15 million in 1979.

Nearly all distillers have voluntarily abstained from advertising over the air since the repeal of Prohibition. Now brewers and wine makers, who spend $700 million a year on broadcast ads, are threatened with a mandatory ban pushed by a citizens' group called Project SMART (Stop Marketing Alcohol on Radio and Television). Broadcasters would suffer most if that happened. Beer and wine makers could shift to other media, just as cigarette companies have done. The broadcasters have reacted with a surge in free public-service announcements warning against drunk driving in recent months. "We're scrambling to get those announcements on the air," admits one network executive.

JOHN HARDING

Real men do drink white wine, *among them this group at the Hayes Street Grill in San Francisco. Wine is the only major alcoholic beverage enjoying increased consumption.*

In the meantime the marketers of liquor, wine, and beer have come up with a dizzying array of products in response to changing tastes. Riunite wine is trying to tag along with the fitness craze by offering jogging gear to buyers of its imported wines. Hiram Walker is hitting faddish boomers where they live by introducing low-alcohol Häagen-Dazs cream drinks, named after the expensive ice cream. Several producers, aiming at women and inexperienced drinkers, are introducing liquor that tastes less like liquor, such as Seagram's vanilla-and-nutmeg-flavored Captain Morgans Spiced Rum. Heublein, a division of R.J. Reynolds, is considering marketing a low-alcohol vodka. Wine producers have increased their good fortunes with wine coolers such as California Cooler and Sun Country. These carbonated flavored drinks, containing half the alcohol of regular wine, now account for 4% of domestic wine's sales—and all of its growth. Seagram is even testing a *no*-alcohol wine called St.Regis.

The brewers, suffering along with the distillers from declining per capita consumption, face similar challenges that require a different marketing approach. An early response, in the mid-1970s, was the introduction of light beers for the diet generation. They took off almost immediately and now constitute 36% of the total market. But low-alcohol brews such as Anheuser-Busch's LA, which seemed immensely promising when introduced, haven't lived up to expectations, and security analysts expect some me-too brands to desert the market soon. Sales of no-alcohol beers like Swiss-made Moussy, though increasing fast, are still minuscule. Explains Joseph Frazzano, an analyst at Oppenheimer & Co.: "Let's face it, a lot of people drink beer to get a buzz."

Abstinence has not damaged sales in America's booming $23-billion-a-year (at wholesale) soft-drink industry—but margins have been severely eroded, largely by increased promotional expenses. Diet soft-drink sales in bars are rising as young people switch away from alcoholic drinks. Traditional soft drinks are still selling well—but diet drinks are where the supergrowth is. According to *Beverage Digest*, an industry newsletter, they already account for 32% of the market, and sales are expanding at a 20% annual rate. G.D. Searle's aspartame, the diet sweetener of choice these days, brought Searle $585 million in 1984 revenues and sweetens a variety of products besides soda, including—imagine—chocolate milk shakes.

Soft drinks without caffeine haven't become the craze that some forecast. But caffeine worries have hurt the coffee industry: it has suffered a 2% drop in per capita consumption since 1980. This has occurred despite a 32% drop in retail coffee prices since 1977, a dramatic rise in sales of caffeine-free coffee products, and a report by the Food and Drug Administration last year that coffee consumed in moderate amounts (about 3½ cups a day) isn't a public health hazard. The situation led the National Coffee Association to launch new advertising on TV a year ago. That campaign pushed the less than credible claim that coffee calms people down; it was quickly reworked.

These days most coffee sellers, seeing growth at the high end of the market, are emphasizing quality and choice. Market research justifies that approach, since ambitious yuppies are leading a trend away from instants to more flavorful grinds. And in the hotly contested decaf sector of the market—now 22% of consumption, compared with 17% five years ago—the biggest winner is General Foods' old reliable Sanka, with a 1984 share of 10%.

The dairy industry, where sales have been flat, has been whiplashed by the twin concerns of obesity and the relation of cholesterol intake to heart disease. But as the swelling sales of cheese demonstrate, consumers may not understand the problem. Plenty of opportunity for marketers remains. As one might expect, lower-fat products are one of the fastest-growing segments of the dairy business; low-fat milk and yogurt are booming. Nonetheless, the American Dairy Association has recognized that the "natural goodness" of all its products is marketable. The group is running ads, such as one for "cheese, glorious cheese," that stress youth-oriented themes and simply ignore the cholesterol problem.

AT CENTER STAGE on the dinner table, pork consumption is decidedly down, and beef sales are holding steady—after a 19% drop in the late Seventies—mostly because of a shift to leaner cuts. Per capita consumption of chicken is up 9% since 1980. Chicken is lower in calories and has less fat than beef, but simple economics explains much of the shift. Chicken costs less than half as much per pound as beef, in part because of cost-saving automation that beef packers can't match.

The best news from all the confusion in the market is that expert salesmanship still works. One of the largest factors in chicken's gain is the popularity of McDonald's Corp.'s Chicken McNuggets. Each deep-fried McNugget contains 50 calories and plenty of fat. The product has hatched scores of imitators and has rekindled excitement about McDonald's prospects—proof, if any is needed, that a well-crafted pitch still works, even on America's new abstainers. ■

APRIL 1, 1985
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FORTUNE

THE BATTERED HOUSE OF HUNT

Herbert and Bunker Hunt

THE DOLLAR'S DANCE— HOW THE ECONOMY WILL RESPOND

WHY CHIEF EXECUTIVES' PAY KEEPS RISING

MONEY LAUNDERING— MORE SHOCKS AHEAD

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APRIL 1, 1985 VOL. 111, NO. 7

FORTUNE
Leisure

FORTUNE
THE BATTERED HOUSE OF HUNT

The Hunt brothers are surrounded by silver in Roberto Brosan's cover photo. Herbert's portrait is by Bob Gomel, and Stephen Northup photographed Nelson. For a look at the Hunts' shaken empire, see page 26.

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The brothers can stand more battering, but their bankers might get more bruises. *by Ford S. Worthy*

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MONEY LAUNDERING—

Hunting for dirty money *in Massachusetts are (from left) U.S. Attorney William F. Weld, 39; Jeremiah T. O'Sullivan, 41, chief attorney for a federal strike*

MORE SHOCKS AHEAD

Banks are just the beginning. Federal strike forces are also looking into brokerage houses, which make dandy laundries, and casinos, which are better still. ■ *by Anne B. Fisher*

force; and special prosecutor Patrick M. Walsh, 38.

EVEN BOSTON'S CAB DRIVERS, normally a shockproof bunch, are scandalized: they can tell you every detail of the troubles at the Bank of Boston, one of Beantown's oldest—and, until lately, most venerable—fortresses of commercial and retail banking. It isn't only that the bank neglected to report to the Internal Revenue Service cash transactions of $1.2 billion with Swiss customers and paid a $500,000 fine. The real stunner was a string of dealings with the Angiulo family, reputedly the premier mobsters of Massachusetts.

The bank conferred privileged status on two businesses owned by the Angiulos, placing them on a special list of customers whose large cash transactions aren't reported to the government. The Angiulo brothers, now awaiting trial for murder, gambling, racketeering, and assorted other thuggish deeds, regularly used to drop in at a Bank of Boston branch toting paper bags stuffed with cash. Since these shady activities were revealed by federal investigators a few weeks ago, the bank has changed its explanation several times and contradicted itself at least twice. Chairman William L. Brown's public comments are reminiscent of Richard Nixon's immortal "I am not a crook." Indeed, Brown is now about as popular in Boston as the former President was on college campuses a dozen years ago.

Startling as the bank's debacle has been, it's only the beginning. More scandals almost certainly lie ahead. Federal investigators, banded into interagency teams called strike forces, are taking a razor-close look at the books of 41 banks across the U.S. and plan to scrutinize the records at 250 more. Meanwhile, the Bank of Boston's fall from grace has sent its local competitors combing back through old records checking for unreported cash, rather than waiting for the feds to find it. In March the Shawmut Bank of Boston discovered that over the past five years it has failed to report $157 million in foreign currency transactions. In addition, the bank told U.S. Treasury officials and bank regulators, it erroneously put 27 business customers in a category where currency dealings needn't be reported.

Federal probers are trying to track down some of the estimated $100 billion they believe is laundered through financial institutions every year. Nor are the investigators looking only at banks. Brokerage houses in Boston and New York are under the magnifying glass too. And Congress has just passed a law that will make gambling casinos, long suspected of being used by launderers, subject to the same reporting requirements as banks and brokerage houses.

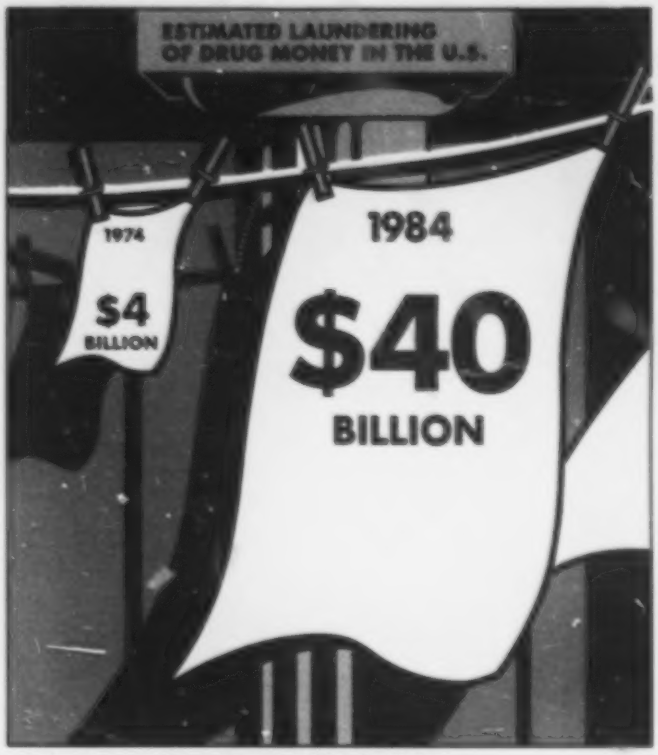
Laundering is the art of moving "suitcase money" from illegal businesses into legitimate financial channels to conceal its unsavory origins. Once underworld characters receive clean money in exchange—most often bank cashier's checks—they can invest in other businesses or splurge on yachts and fur coats. A big chunk of the elusive $100 billion seems to come from illegal gambling, prostitution, and other such enterprises. More than a third, though, probably arises from the drug trade. Cocaine, in particular, is a hot commodity.

If law enforcement efforts could keep drug traffickers from washing their money, the President's Commission on Organized Crime reasons, drug dealers might be obliged to find some other line of work. The current government crackdown, based on that sunny logic, has become a political cause célèbre in Washington. Alarmed by the rising flow of drugs into the U.S., mostly from Latin America, Congress late last year passed an amendment requiring President Reagan to cut foreign aid to countries that don't beef up programs to stop it. The President's Commission on Organized Crime is also calling on the U.S. private sector to turn away the mob's money. It's pointless, after all, for the Administration to insist that the government of Colombia help out if U.S. banks won't.

One incongruity here, as the commission acknowledges, is that money laundering as such is not a crime. No law, federal or state, imposes a penalty on a person who just happens to have a million dollars or so in a card-

PHOTOGRAPHS BY GORDON/TRAUB—WAYFARER

board box and wants to buy a cashier's check. If law enforcers later find the money to be the proceeds of a brisk business in cocaine, they may have evidence for a drug case. But the money laundering, however often it may have been carried out, isn't an issue. The commission wants a new law that would make laundering a crime, and will probably get its wish.


ESTIMATED LAUNDERING OF DRUG MONEY IN THE U.S.
1974
$4 BILLION
1984
$40 BILLION

This Laundry Isn't Shrinking

In a decade in which $100-a-gram cocaine became the drug of choice for the upwardly mobile, authorities on money laundering estimate that the amount of money U.S. drug purveyors wash has grown tenfold.

For now, all that federal authorities can do is enforce the Bank Secrecy Act, which the Bank of Boston violated. Passed in 1970, it requires banks and other financial institutions—including savings and loans, brokerage houses, and currency exchange businesses—to file a report with the IRS describing every cash transaction of more than $10,000.

The criminal penalties for willful and repeated failure to report are severe. Both the bank and an officer can be fined $500,000 for a series of violations, and officers can go to prison for up to five years—which a bill in the House would double to ten years. Unreported international currency transactions can result in similar penalties, plus a civil penalty equal to the amount of currency involved. The Bank of Boston's $500,000 fine was for Swiss transactions unrelated to the Angiulos. Possible grand jury indictments of the bank's officials are yet to come.

The law allows banks to forgo the reports for some customers that routinely deal in lots of cash, though real estate companies and investment firms such as those the Angiulos run in Boston are almost never among them. Grocery stores and parking lots are exempt from the reporting requirements. So are casinos and race tracks, despite their longstanding low-life image.

A bank might have any number of reasons for not wanting to file a currency transaction report. The IRS's Form 4789—which is supposed to be filled out by the teller or, more usually, the branch officer who okays the transaction—is a one-page questionnaire that raises ticklish points. What is the customer's taxpayer identification number? (Gulp.) What is his occupation? "Do not use nondescriptive terms," the instructions badger, "such as 'self-employed' or 'businessman.'" But neither "drug dealer" nor, say, "hit man" is likely to go over big.

To keep a valued customer, many a hapless bank manager has agreed to skip the reporting, often in return for a fistful of the greenbacks in the bag. The Garfield Bank in Los Angeles and the Pan American International Bank in Las Vegas were among those that were using this ploy until a couple of years ago. Garfield may wind up paying $2.3 million in fines, penalties, back taxes, and interest. Pan American's fines were smaller, but its former vice chairman has been sentenced to prison and, though out on bail, could wind up playing Ping-Pong behind the big wall.

THE MOST WIDESPREAD cause of failing to file, however, appears to be simple incompetence, or "systems failure"; for a time that was the Bank of Boston's explanation. Bankers do have an awful lot of regulations to worry about, and alas, once in a while a rule just escapes bankers' notice. "When they are educated, they comply beyond the letter of the law, and most big banks do comply," says Gerard J. Kenna, a former FBI agent, now a consultant to the American Bankers Association. "But I can tell you that I know some extremely dedicated bankers who don't understand some of the simple, basic provisions of the Bank Secrecy Act." Judge Irving R. Kaufman, chairman of the President's Commission on Organized Crime, says he has talked to plenty of bank officers who are "unaware of their obligation under the law to report cash transactions. Or they just don't know what's going on in their own organization."

Another set of laws, bankers sometimes argue, can discourage them from reporting launderers. Even when bank employees know what's going on, they must worry about federal and state privacy laws. In 1978 Congress passed the Right to Financial Privacy Act, which, like many state laws, severely limits what banks can tell lawmen.

Suppose a bank officer observes transactions that are technically legal but don't smell right, such as a series of cash deposits just under the $10,000 reporting limit. At the most, the law allows a bank to notify authorities that it has information that "may be relevant to the violation of a regulation or statute." The bank may identify the customer, but is not allowed to turn over customers' records to government investigators. The FBI, the IRS, or the Customs Bureau, however, could choose to follow up on the cryptic tip with a warrant for the person's records. In that case the customer might sue the bank for civil damages for calling in the feds.

Because of the privacy laws, some banking attorneys say, banks might be excused for accepting a lot of cash business that comes their way, no matter how peculiar. But experience under the laws suggests that the bankers' fears may be overwrought. According to the American Bankers Association, no U.S. bank has yet been sued under the federal or state privacy laws. And a proposed amendment to the federal law would make it easier for banks to win lawsuits.

Outside auditors, it might seem, could

RESEARCH ASSOCIATE *Brett Duval Fromson*

"We are fighting *criminals who have more money than we do,"* *says John Walker, 43, the Treasury Department's enforcement chief.*

spot laundering that banks neglect to report. They rarely do. Coopers & Lybrand, the Bank of Boston's accounting firm, declines to comment. Declares a partner in another Big Eight house who asked not to be named: "You would probably never find an auditor even checking for compliance on something like this. The audit would never get done if we checked for every damned form a bank has to file. It is not our job to police the morals and ethics of the bank."

More banks—particularly in New England—are now trying harder to police themselves. Not that the Bank of Boston was the first to suffer the indignities of federal fingerpointing; far from it. As long ago as 1977, Chemical Bank in New York fired 24 employees for cooperating in money-laundering schemes. Chemical paid more than $200,000 in fines. In 1983 National Republic Bank in Chicago admitted it hadn't reported $165,000 in cash business from cocaine dealers and paid a $15,000 fine. Florida has been a hotbed of money-laundering convictions and prosecutions: since July 1980 a federal crackdown, code-named Operation Greenback, has led to 211 indictments, 63 convictions, $38.5 million in dirty money seized, and $117 million in bank fines. But New England has been under particular scrutiny since 1982, when a study by the Treasury Department showed far more cash on the books in banks north of Connecticut than those banks had accounted for in their transaction reports to the IRS.

LAST FALL Rockland Trust Co., a small bank in Plymouth, Massachusetts, and officers of the Ausonian Credit Union in Boston were indicted for failing to file currency reports. The Ausonian further neglected to keep any records at all on certain customers. Other New England banks began feeling the heat well before any indictments were announced. The vice chairman of one tells, rather nervously, of a sales campaign at one of his bank's branches offering a high rate on certificates of deposit. "The feds came swooping down, wanting to know if there had been any unusual cash transactions," he says. "There was one. Thank God we had already reported it."

For some, such vigilance may come too late: Patrick M. Walsh, an attorney for the Justice Department who helped prosecute the Bank of Boston, has told FORTUNE he expects a grand jury to hand up indictments of Boston banks and bankers in the next few months.

Walsh hints he may also move on other kinds of financial institutions. In New York City, U.S. Attorney Rudolph W. Giuliani, who recently made headlines for his part in the arrest of five organized crime leaders, is a bit more specific. "We are looking at brokerage houses," he says. "The percentage of currency-report filings for brokerages is much lower than for banks. For the longest time the brokers have really paid no attention to this at all."

Brokerage houses, less closely regulated than banks, are logical places for laundering. In 1982 the Securities and Exchange Commission wrote a rule that delegates the task of monitoring currency reports to the securities and commodities exchanges. The New York Stock Exchange does check to see whether the brokers file the reports, but only once a year, and only cursorily. "We do a spot-check as part of our regular yearly financial examination," explains an official at the Exchange. "The currency reporting part is done in a very short amount of time."

Executives of brokerage firms insist they discourage cash transactions for security reasons; most simply haven't got a safe enough place to keep big bundles of bills. Though no Wall Street house has embraced a policy of turning away greenbacks, Merrill Lynch came close two years ago by setting a $100 limit per transaction. But brokers, who unlike bankers get paid largely in commissions, are under pressure to bend the rules to keep sales up. Says an official at one brokerage house: "If somebody wanted to launder money by buying stock—well yes, they could do that. It probably happens all the time. But not at this firm."

It happened at Merrill Lynch and E.F. Hutton. In 1982 a heroin ring run by Joseph Bonanno, a prominent New York godfather, used an account set up for a Swiss corporation called Traex to launder more than $4 million through Merrill Lynch's New York office. A courier named Franco Della Torre carted the cash through the front door in bags of $5, $10, and $20 bills. The transactions seemed exceedingly odd to Merrill Lynch security people, who noticed that Della Torre was nervous about standing in front of closed-circuit TV cameras. After conferring with staff members in Switzerland, Merrill Lynch closed the Traex account.

TOUGH TO DISCOURAGE, Della Torre took his business to E.F. Hutton. There he met with a warmer reception. Security personnel helped him carry suitcases full of small bills from his hotel room straight to Bankers Trust, where Hutton keeps its customers' money. According to federal investigators, nobody from E.F. Hutton ever called the firm's legal department or otherwise let on that anything was amiss. Later, when the FBI was closing in on the Bonanno-Traex ring, Hutton notified one of Della Torre's associates in Switzerland that it had received a subpoena for Traex's records. As a result, the Swiss arm of the heroin enterprise disbanded and got away. The FBI now claims its agents asked Hutton not to tip off the client, but Hutton disputes this. Thomas Rae, general counsel at Hutton, says there was "a misunderstanding." No one at E.F. Hutton has been charged with a crime.

Other brokerage firms have managed to keep their money-laundering mishaps out of

Tucked away *in the city's North End, the Bank of Boston's Hanover Street branch at left saw the comings and goings of reputed mobsters bearing bags of cash.*

HOW TO CLEAN UP YOUR ACT (IF YOU HAVEN'T ALREADY)

■ *We did not realize the seriousness of the problem. We did not perceive the regulation as very important. We were not prepared.*

So laments a since departed Bank of Boston executive. The bank's sad saga is a case study of how not to comply with the Bank Secrecy Act of 1970. For executives of other financial institutions who want to avoid such tribulations, here are tips from banking experts, lawyers, and federal enforcers:

Educate your employees. Teach all who handle currency to report all large transactions precisely as the regulations require. Leave no doubt in anyone's mind that those who don't will be fired. Federal investigators will not accept lame excuses for partial compliance when they come knocking, subpoena in hand. The teaching job may soon be easier. In a March meeting, officials from ten federal agencies tentatively agreed with representatives of the banking and thrift industry to launch a massive program to educate everyone from tellers to chief executives.

Appoint a reporting czar. Managers who oversee currency transactions must not be relied on to vouch for the accuracy of transaction reports and lists of companies exempt from the reporting rule. Launderers are expert at bribing and blackmailing those in the front lines. Instead, designate an officer to review all reports for accuracy and make sure they are sent to the government straightaway.

Keep watchdogs prowling. Once everyone understands the rules, set up an internal audit group to see that they are followed. These home-grown snoops must have the freedom to run spot-checks as well as regular investigations. If they find that your institution is not in compliance, get in compliance even if it means belatedly filing reports for past transactions. Whatever fine you pay will be a pittance compared with the grief and penalties in store if the U.S. Treasury—Washington's main watchdog—discovers the problem on its own.

Know your customer. With your defenses in order, take the initiative. Employees who deal directly with customers must learn to identify suspicious patterns of currency transactions, even those below the $10,000 reporting threshold. Don't look the other way; inform the regulators at the Treasury. If at a later date you run afoul of the law, you can argue prior compliance and reasonably expect the feds to treat you with some compassion.

If a subpoena arrives . . . You have taken all this advice but a federal grand jury nevertheless serves you with a writ. Take drastic action. Top management must quickly and quietly find out what happened. If there are guilty or incompetent employees, fire them. Then tell the prosecutors at the U.S. Attorney's office in your city what happened, how it happened, and why it won't happen again. Play it straight with them. Remember the words of J. Michael Nolan Jr. of the New York law firm Pitney Hardin Kipp & Szuch, who pulls banks out of hot water for a variety of infractions: "Unless you really want to play Russian roulette, don't stonewall or try to get tough with the feds. They love to play hardball. You are just another case to them. You will end up before a jury of 12 strangers who love bankers even less than they like lawyers."

If indicted . . . You haven't been listening, in which case you may be innocent or you may be a crook. If the latter, you're best off copping a plea, paying the fine, and hoping you don't end up doing the prison laundry. **—Brett Duval Fromson**

the newspapers. Smith Barney, for instance, had a broker in Los Angeles a couple of years ago who helped a client a mite too much. The client had bags full of cash and wanted to open an account. Smith Barney's man told him to get a cashier's check from a bank, but the client was afraid to lug so much lucre around town. So the broker picked up the money at the client's house and ran the errand for him. That cost the broker his job. "It was obvious to us that it was very dirty money," says a Smith Barney executive. "We decided we didn't need a broker who might be an accomplice to God knows what."

Both bankers and brokers say they tell their clients at the outset that any cash transaction of more than $10,000 will be reported to the authorities. Despite this, underworld characters prefer to bring their money to these institutions instead of laundering it through mob-owned businesses. "Maybe they just aren't as smart as people give them credit for," muses a Wall Streeter. What's more likely is that mobsters, to paraphrase F. Scott Fitzgerald, are different from you and me: they're often far less afraid of the law than of dealing with their own colleagues. Says John D. Johnson, the IRS district director in Boston, "In a typical money-laundering transaction, the guy with the cash isn't worried about the feds. He's worried about getting ripped off or killed. People in this business just don't live very long."

THE EASIEST WAY to launder money is through casinos. Federal authorities, in stepped-up snooping, have found 381 instances in which money launderers used them. A common strategy is to haul, say, $100,000 in cash into a licensed gambling establishment in Atlantic City or Las Vegas and buy chips with it. Already the money is "clean"; it can't be distinguished from any of the other piles of small bills a casino keeps in its vault. The next step is to gamble away some of those chips, $5,000 or so, just to make it look as though the customer really wanted to play. Then the rest of the chips can be turned in at the cashier's window for a $95,000 credit, which the launderer instructs the casino to wire to its branch in Bermuda or Belize. The launderer needs only to hop a plane to pick up his money and stash it in a foreign bank. This charmed scheme will soon entail new risks. Starting in May, casinos will have to file the same currency reports that banks and brokers do. To get around this, a would-be launderer will have to buy smaller stacks of chips.

The federal government is unlikely ever to stamp out laundering, or even most of it. Gerard Kenna, the FBI-agent-turned-bank-consultant, believes it's possible to detect less than 5% of all money washing. An unfathomable amount of dirty money—muggers' money from selling stolen goods, for example—will never be reported. Big-time money launderers have a powerful financial incentive to find new ways around the feds, and even the gung-ho President's Commission on Organized Crime concedes that "the degree of sophistication and complexity in money-laundering schemes can be virtually infinite." But Washington's message to financial institutions couldn't be clearer: those who don't want their names dirtied by laundering, Bank of Boston style, must choose their customers carefully.

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FORTUNE
THE FORTUNE
500

Roberto Brosan shot the cover photograph of Nicholas Fasciano's marble carving. Star performers in the FORTUNE *500, the carmakers are represented by the autos bound for market in Charles Thatcher's photograph across these pages. See special report, page 252.*

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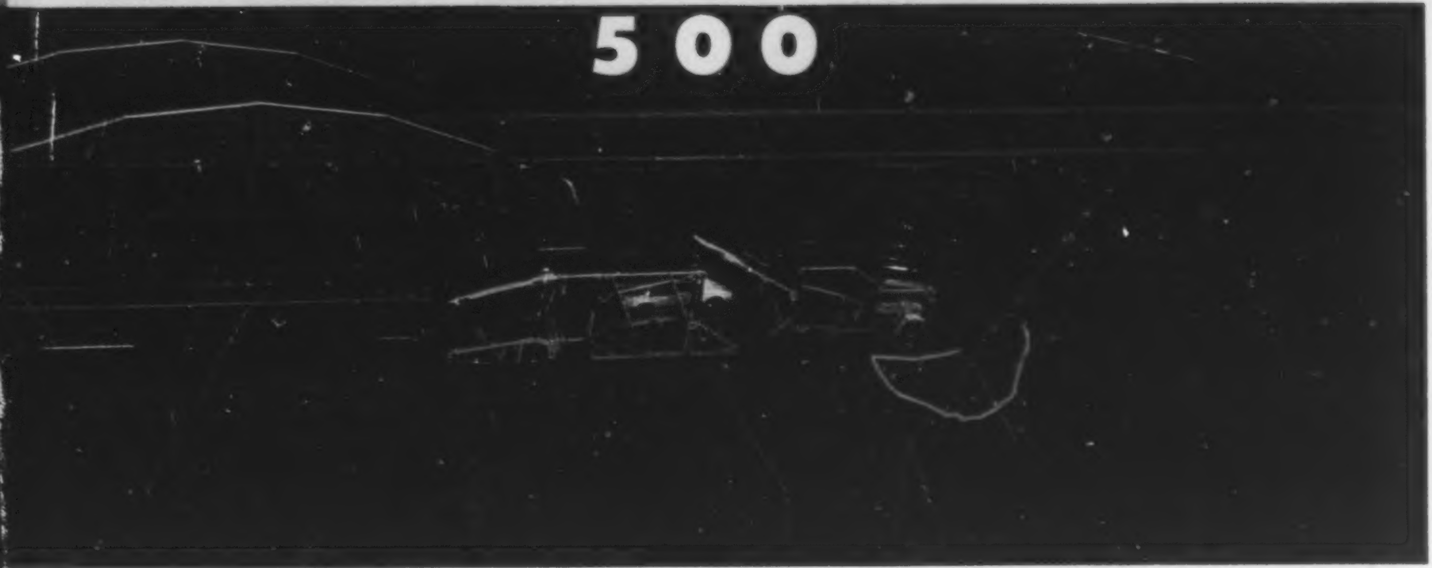

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BEATING THE MARKET BY BUYING BACK STOCK

A company just isn't in the swim today unless it's buying its own shares. Are buybacks a fad—or do they pay off for investors? A ground-breaking FORTUNE study shows that buybacks have made a mint for shareholders who stuck with the companies carrying them out. ■ *by Carol J. Loomis*

DOES IT PAY a company to buy its own stock? A world of companies have come around to thinking that it does. Last year, according to a Merrill Lynch count, about 600 companies announced programs to repurchase their stock—a record, by a mile. Salomon Brothers estimates that $26 billion went into repurchases during the year, another runaway record. The list of companies in the game includes the large and elite, many among the FORTUNE 500: Exxon, Standard Oil (Indiana), American Home Products, Coca-Cola, General Foods, on and on.

This burst of activity, however, has taken place in a certain statistical vacuum. No one could say how good stock buybacks have been over the long run for shareholders who stayed with the repurchasing companies. Anyone might marvel at Teledyne, the most celebrated buyback company over the years, whose shareholders have made out smashingly—achieving a gain, since the buybacks began in 1972, of more than 3,000%. But that standout performance hardly serves as a testimonial to buybacks in general. How about all the other companies that over the years, with somewhat less verve and certainly much less public attention, were buying large chunks of their own stock?

To that question, FORTUNE now has an answer. Working with the 1,660 stocks covered by the Value Line Investment Survey, we identified companies that bought significant amounts of their own common stock in the ten years from 1974 through 1983. Next we reduced this list to voluntary repurchasers—cutting out, for example, companies that had bought the shares by paying "greenmail" to get rid of a threatening shareholder. Then we measured the total returns (stock appreciation plus dividends) earned by shareholders from the approximate dates of each repurchase "episode" to the end of 1984. For exactly the same periods, we compared the results with total returns earned on Standard & Poor's 500-stock index, a generally accepted indicator of "the stock market."

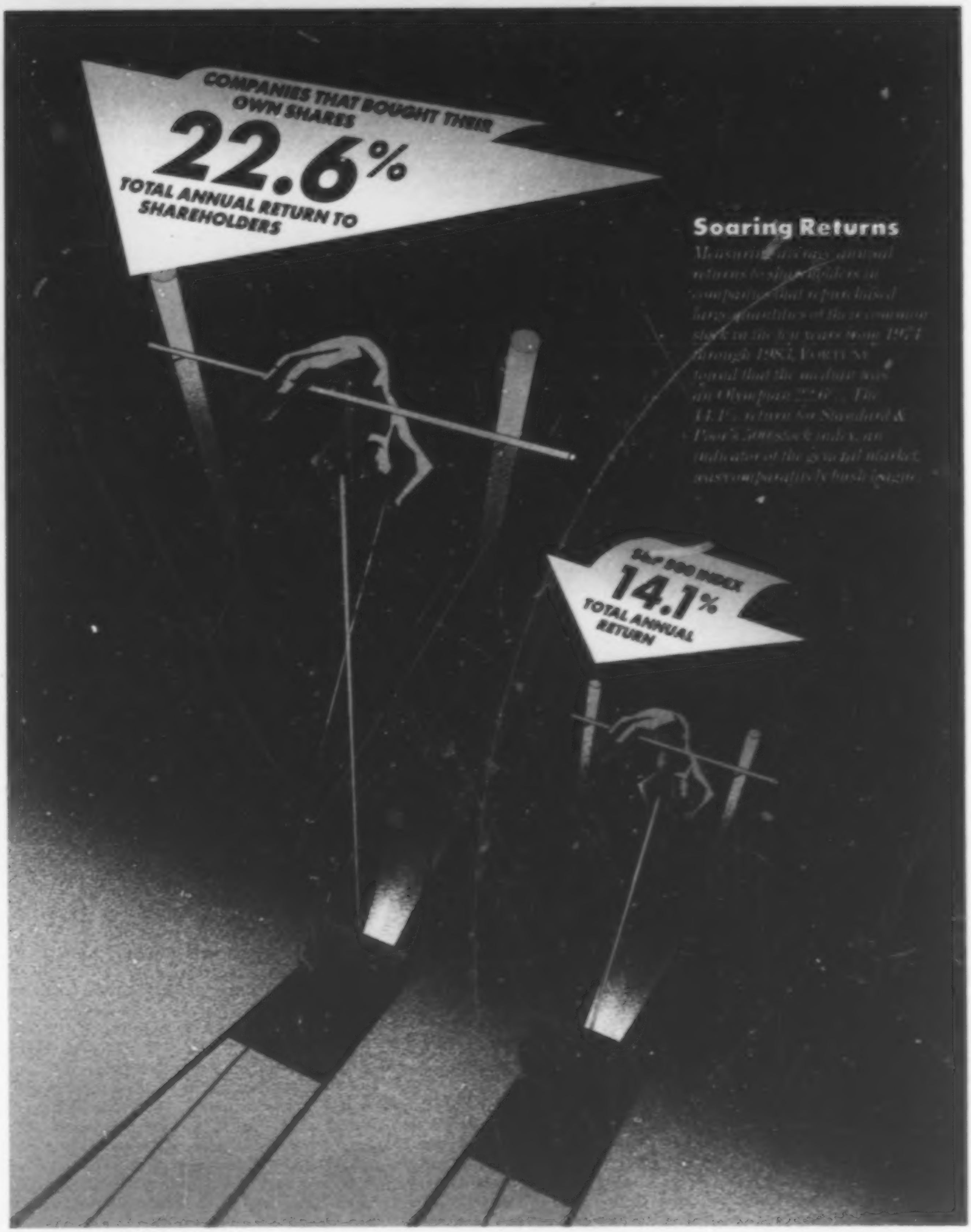
The outcome is spectacularly decisive. The shareholders in the buyback companies earned superb returns, far exceeding those accruing to investors as a whole. For all episodes measured, the buyback companies showed a median total return, expressed as an annual average, compounded, of 22.6%. The equivalent return for the S&P 500 was only 14.1%. That difference of 8.5 percentage points is enormously significant to an investor: at 22.6%, a stake of $1,000 grows to $7,670 in ten years; at 14.1%, it grows to only $3,740. Clearly, the managers of the buyback companies, in aggregate (though certainly not in every instance), added heroically during these years to the wealth of shareholders who remained in the fold. (For a list of companies that have been big buyers recently, see box.)

These findings cannot cheer the critics of buyback programs, who tend to regard them as close to unpatriotic. Why, some skeptics ask, should tax breaks be granted to corporations in the name of "capital formation" when so much money is flowing lazily and unproductively into repurchases? Why, especially, in an age of gigantic government deficits?

Eugene M. Lerner, professor of finance at Northwestern's Kellogg Graduate School of Management and a critic of buybacks, wishes for corporate actions more "socially useful." It's discouraging, he says, to see managers spending so much time "screwing around with the market, instead of finding good business opportunities, competing against the Japanese, and minding the store." Lerner thinks the market should view the announcement of a buyback as a negative signal—an admission that a company has run out of constructive things to do with its money. But the market, he concedes, doesn't see things that way, and he is unsurprised to hear that the buyback crowd has achieved superior results. He is also unimpressed: "You make a lot of money peddling drugs too, but I'm not in that business either."

Under examination, the arguments against repurchases lose much of their force. If it is wrong for companies to channel money to shareholders instead of retaining it for corporate use, dividends as well as repurchases should be under a cloud. But few people go that far in their criticism—certainly not Lerner, who regards dividends as "a glorious discipline" to which corporations definitely should be subject. The money paid for repurchases, moreover, does not vaporize once it reaches stockholders and lose its capacity for doing constructive work. Some of it goes for taxes—assessed at preferential capital-gains rates, rather than the full rates paid on dividends. Once the Internal Revenue Service gets its due, the rest of the money

RESEARCH ASSOCIATES *Ruth Moss, Edward Baig*


COMPANIES THAT BOUGHT THEIR OWN SHARES
22.6%
TOTAL ANNUAL RETURN TO SHAREHOLDERS
S&P 500 INDEX
14.1%
TOTAL ANNUAL RETURN

Soaring Returns

Measuring average annual returns to shareholders in companies that repurchased large quantities of their common stock in the ten years from 1974 through 1983, FORTUNE found that the median was an Olympian 22.6%. The 14.1% return for Standard & Poor's 500-stock index, an indicator of the general market, was comparatively bush league.

ILLUSTRATION BY TERRY ALLEN

trucks back into the economy, with a part of it unquestionably round-tripping into stocks.

The big positive point about repurchases is that they have showered benefits on stockholders who stayed aboard the buyback companies. For the period covered by FORTUNE's study, repurchases were an intelligent use of money by managers who had, as they always do, a range of alternatives. If the rate of return looks attractive, they can plow funds into the development of new products or into plant and equipment. A second alternative is to buy other companies. A third is payouts to shareholders through dividends or repurchases.

If a company's stock is undervalued—as many managers believe theirs is—a repurchase may offer the best payoff of all. Approaches to determining stock values vary, but fundamentally each company judging itself undervalued is saying that its future stream of earnings justifies a higher price than the stock market is willing to accord it. To capitalize on this situation, a company will normally have to expend cash or other assets for its shares, thereby shrinking its total wealth. But because each $1 spent will buy more than $1 of value, the stockholders who retain their shares will emerge with more wealth *per share* than they started with.

The sultan of buybacks *is Henry E. Singleton, 68, chairman of Teledyne, which over the years has repurchased 85% of its shares for about $2.7 billion. A model of flexibility about his stock, Singleton used it as currency when Teledyne was a 1960s highflier, issuing bundles of shares to acquire companies and build his conglomerate. But when Teledyne's price-earnings multiple dived, he switched to repurchases. The first was in 1972 at a price (adjusted for splits and stock dividends) of $8 a share, the last at $200 in May 1984. The shares then leaped to $300 and were recently at $250.*

Imagine, for example, a company with this financial profile: $200 million in assets, including $38 million of spare cash invested in commercial paper; $120 million in shareholders' equity; projected earnings for the next year of $20 million (after taxes), including about $2 million in interest to be earned on the commercial paper; ten million shares outstanding, which means earnings per share are expected to run $2; and a stock market valuation of $160 million, or eight times expected earnings. But the company's executives are quite sure that the company is worth more like $300 million—to, say, a private buyer. In other words, they believe the true value of the company to be around $30 a share, rather than the $16 a share that is the stock market's appraisal.

So the company makes a tender for two million of its shares at $19 each, thereby spending $38 million (leaving aside costs for lawyers, investment bankers, and the like). That strips $38 million from assets, which fall to $162 million, and from stockholders' equity, which falls to $82 million. The company thus shrinks and also becomes more leveraged. That is, each dollar of equity is now supporting $1.98 in assets vs. $1.67 previously.

The value of the company to a private buyer also drops, we may assume, by $38 million (to $262 million), and expected earnings fall by the $2 million that will no longer be earned on the commercial paper. But only eight million shares now exist to split the corporate wealth. The forecast for earnings is revised to $2.25 per share, up 12.5%. The true value per share, based on the $262 million the company might bring in a private deal, rises to $32.75, up 9.2% from the original $30.

The stock market will be coping with all these facts in its own independent, unpredictable way. While the tender is in progress, at that premium price of $19 a share, the stock price will undoubtedly rise from its former $16. But it can be argued that if the market remains consistent in its appraisal of the company, its total market value should drop by $38 million—the shrinkage on both sides of the balance sheet—once the tender is completed. Were that to happen, the market price of each of the eight million remaining shares would be only $15.25 and their price-earnings multiple less than 7. That multiple could even seem logical because of both the premium paid for the repurchased shares and the added leverage injected into the company. Though leverage can be wonderful in prosperous times, it can be terrible in bad. Bond-rating agencies, in fact, sometimes lower the ratings of repurchasers, as Moody's did recently with both Teledyne and Holiday Inns. Both are among the many companies that have not only pumped up le-

PHOTOGRAPHS BY WILLIAM COUPON

verage by buying in stock, but have also raised cash to do it by adding debt.

As it turns out, neither the leverage created by buybacks nor much else about them appears to have bothered the stock market. Various academic studies of tenders have shown that the stock seldom slips to $15.25 (to stay with our example) when a tender is completed and instead stays well above the old price of $16. Say the post-tender price is $18. That would mean the market had knocked only $16 million from the company's total market value—less than half the amount expended to buy shares.

The results of FORTUNE's study are consistent with the academic findings. But they add a whole new body of information about the long-term effects of buybacks. Furthermore, FORTUNE's results, good as they are, present a conservative picture of how well the buyback companies did. For one thing, the study covers only companies still public at the end of 1984. It omits companies that repurchased large quantities of their stock but later were acquired at prices far above the market (Norton Simon, for example) or that bought in all their shares at premium prices and went private in the ultimate buyback (like Metromedia). Were these winners added in, the returns would surely look even more superlative. Second, we did not assume that investors jumped into a buyback situation early. Instead we assumed that they bought in only after a company's repurchases had become a matter of public record—and after the share prices, in many cases, would have moved up.

TO BEGIN with, we identified Value Line companies that, in one or more years from 1974 through 1983, repurchased enough shares to reduce those outstanding by at least 4% (or that, in a few cases, repurchased convertible securities and warrants that are common stock equivalents). The 4% standard limited the study to hard-core buyers. The soft-core sort would be the many companies that buy relatively small amounts of their stock for "housekeeping" reasons—for example, to supply shares for option and other employee-purchase plans.

The search for 4-percenters turned up about 360. But we wanted only the companies that seemed to be buying on their own initiative, simply because they saw unrecognized value in their stock. So besides weeding out greenmail repurchasers, we excluded other companies that may have been buying because they felt an obligation to do so. For example, purchases made from a former officer or director, or from estates and foundations linked to the buyback company, were disqualified.

Liking leverage *for the boost it can give return on equity, Tandy Corp., home of the Radio Shack chain (see Selling), has been a big buyer of its stock. The man in charge of purchasing, Garland P. Asher, 40, director of financial planning, says Tandy has bought at "horrible times" that initially made it look like "a chump." But the buying done in the 1970s eventually produced rich payoffs. Since late 1983 Tandy has been back in its chump mode: Asher has bought while the stock has sunk. "But that's the point," he says. "You don't want to buy your stock when it's strong."*

In this weeding, we looked at all the companies among the 4-percenters big enough to have made the 1983 FORTUNE lists of the 500 largest industrials and the 500 largest service companies. Of 136 such companies, 87 appeared to be voluntary buyers meeting our criteria. Wanting also to examine the experience of smaller companies, we added a random sample of 100 that seemed to be buying voluntarily. So the total number of buyers included in the final survey was 187. Many of those met the 4% standard in more than one year, and returns to their shareholders were measured, through 1984, for each purchase. In all, the 187 companies accounted for 312 "years," or episodes, of buying.

The results for shareholders had to be measured from a logical time within or after each episode. Fixing that point was easy in the case of cash tender offers and offers to exchange senior securities for common stock. These events are always announced, and therefore we began measuring returns from the end of the month in which the announcement was made. By that time, the news of the tender or other offer would already have caused the price of the stock to jump in recognition of both the premium to be paid and any other pluses investors saw in the repurchase. Because we began measuring only after such jumps had occurred, the results of the study don't include them.

An after-the-fact procedure was also used for open-market purchases, which are commonly strung out over months and even years. Many companies announce these repurchase programs when they begin. But the Securities and Exchange Commission does not require an announcement and some companies never make one. Word of their repurchases, however, is generally passed along by Wall Street traders and analysts. Quarterly reports to shareholders may confirm that buybacks have taken place. At the latest, a shareholder can discover that a company has bought a significant number of shares when its annual report is published.

Taking all this into account, FORTUNE adopted a compromise approach for open-market purchases, beginning to measure returns at the end of a fiscal year in which the company experienced a reduction of at least 4% in its outstanding shares. This delayed start means that any help a company's buying gave its stock *in that year* was disregarded in the returns we measured.

Glenn W. Bailey's managerial stripes *were earned at ITT under Harold Geneen, whose burning ambitions never included stock buybacks. But after Bailey began running the company now called Bairnco Corp., a maker of lighting fixtures and electronic components, he watched its stock collapse in 1974 to 25% of book value and three times earnings. "Very interesting," he said, and bought until the price hit book seven years later. The stock is up 4,300% since the 1974 low. Bailey, 59, has an 11% stake, recently worth $33 million, that keeps his attention on what's best for stockholders.*

But some companies kept on buying their stock. Does that mean their presence in the market could have boosted investors' returns later? The point is important because many people suspect the basic purpose of repurchase programs is to "prop" the stock—to push up its price or, at the least, keep it from falling. Some companies own up to such intentions. In a 1983 study conducted by the Conference Board, a business research group, 72 companies that had been big repurchasers of stock ranked their reasons for buying. Eleven said one of their objectives was to support their stock's market price, and nine of the 11 ranked that objective first, second, or third. But the Conference Board also asked the 72 companies what impact their repurchases appeared to have had on market prices of their stocks, and only a relative few saw a positive effect. More than 80% discerned no impact at all.

As that suggests, propping is difficult, in part because of an SEC rule, 10b-18, that deals with repurchasing. In the SEC's language, the rule is not "prescriptive." Rather it describes a code of conduct that, if followed by corporations, will provide them a "safe harbor" against charges of manipulating their stocks. The code suggests that companies should: (1) stay out of the market in the early and late moments of the trading day, so as to avoid having an influence on opening and closing prices; (2) follow the market up rather than lead it; and (3) limit their trading volume in any one day to no more than 25% of the average daily volume in their stock over the preceding four weeks. If repurchasers follow those guidelines—and Wall Street traders say most do—their opportunities for propping are not bigger than a breadbasket.

Furthermore, a company buying its own stock is simply a single force in the market, seldom more powerful than a large institutional investor, and no more able to stem a tide of selling. Says Kevin M. Gately, a vice president of block trading at Kidder Peabody: "If everybody wants to bail out of a stock at the same time, the company can't hold it up."

FORTUNE's survey results, in fact, include buybacks that boomeranged. Not many, to be sure—there were only 32 negative returns in the 312 episodes of buying—but enough to prove Gately's point. When business in the oil patch began to sag, a good many oil and oil field service companies stepped up to buy their stock, among them Consolidated Oil & Gas, Northwest Industries, and NL Industries. Sellers whipped them. Says a disgruntled NL executive: "Buying our stock is not something we'd be likely to do again." Suave Shoe Corp., a Florida manufacturer that repurchased large quantities of stock in fiscal 1982 and 1983, also stumbled badly. The company began running losses partly attributable to competition from importers helped by the strong U.S. dollar. Following the 1982 episode of buying, Suave's shareholders suffered an annualized loss of 27%, and after the 1983 episode, 38%—the worst result in the survey.

On the other hand, the star performer was Charter Medical, a Macon, Georgia, owner and operator of psychiatric and conventional hospitals. In 1977 Charter twice offered shareholders preferred stock in exchange for common, reducing its common shares outstanding by about 42%. The shareholders who held on to their common—they include founder and Chief Executive William A. Fickling Jr.—have since realized average annual returns of 71% (from the date of the first tender) and 79% (from the second).

The exchange offers were obviously

classy business decisions—except that Fickling and Charter have recently been sued by two former common stockholders who accepted preferred stock in the exchanges and think they got taken. They charge that Charter withheld bullish information from the common shareholders (which the company denies doing) and therefore induced them to accept the preferred. Other buyback companies have been sued on similar grounds.

Charter Medical was one of the smaller companies randomly chosen for FORTUNE's survey. The small companies as a group, however, lagged somewhat in performance, racking up a median total return of 21.3% for all episodes measured, vs. 24.1% for the bigger companies studied. And despite Charter Medical's success with exchange offers, one-shot deals—tenders and exchange offers—generally brought smaller gains than open-market purchases. More numerous as well as more successful, the open-market episodes of buying resulted in a median return of 24.1% against 19.6% for the tenders and exchanges. Score one more for the tortoise.

ALL THAT, though, is trivia compared with the big general conclusion that buybacks, regardless of who did the purchasing or how, worked superlatively for shareholders. The natural question is why. The most likely answer is that a lot of managers were smart twice over. First, they correctly judged their stock undervalued. Second, they were willing to commit capital to that proposition.

Some managements do not even think of buybacks as an option. The idea of shrinking their equity base repels them. Their inclination instead is to get bigger, and this often leads them to pay rich prices for acquisitions that never earn their keep. Part of the reason for the superior returns of the buyback companies, no doubt, is that they simply did not make as many bad acquisitions. Says Garland P. Asher, director of financial planning at Tandy, a buyback company: "You can argue that at the very least a share-repurchase program keeps people from making mistakes."

A buyback is itself a special kind of acquisition, made at prices that are typically a bargain compared with those a company must pay for an outside purchase. Thomas S. Murphy, chairman of Capital Cities Communications, has for many years weighed outside acquisitions against the inside variety, sometimes buying other companies, sometimes buying Cap Cities by repurchasing its stock. In the company's 1983 annual report, Murphy described acquisition opportunities as too highly priced and noted that the company had been a buyer of its own stock during the year. But in March he found an outside megadeal he couldn't refuse, agreeing to acquire ABC for $3.5 billion.

Other companies have seen hard-to-resist advantages in repurchases. Says an executive of a Midwest company: "We looked at what we could buy and decided our own shares were the best value. We know our own company. We didn't know others as well."

His thinking parallels that of investment banker Goldman Sachs, which in a 1983 presentation to client Getty Oil reeled off a string of reasons the company should buy its own stock. Said Goldman, paraphrased: "You will be purchasing crude oil and gas reserves substantially below fair-market value and below what you would pay in a competitive acquisition of another company. The price will also be below finding costs for new reserves. The risks of Getty's business are already well known to management. Repurchases do not disrupt operations. Management time will not be spent on the reallocation of people and resources." Because Getty Oil was then caught up in a fight with the man who controlled 40% of its stock, Gordon P. Getty, the company did not follow Goldman's advice. Texaco, showing no appetite at the time for its own stock, subsequently bought Getty Oil in one of those competitive acquisitions Goldman was talking about, spending more than $10 billion to do so. Later, Texaco got suddenly interested in its own stock as well, spending $1.28 billion to buy out the Bass brothers in a greenmail deal.

Exxon has spent more than $3.5 billion *since mid-1983 buying 10% of its stock, and it shows no sign of stopping. Architect of the program has been Jack F. Bennett, 61, senior vice president, who has paid an average of $41 a share (against a recent price of $50). Since an average of around 18 barrels of oil and of natural gas equivalents underlay each Exxon share during this period, Bennett in effect bought reserves at $2.28 a barrel—approximately half the company's worldwide finding costs. Exxon has nevertheless maintained a huge exploration program.*

A buyback enthusiast, Bernard A. Edison, president of Edison Brothers Stores, a chain retailer of shoes, says that its repurchases reflect the wish of those running the company to "manage the stock from the point of view of the stockholder, not that of management." He and other insiders control 37% of Edison's stock, which undoubtedly helps them to think like stockholders. Substantial holdings by insiders are, in fact, a feature of many of FORTUNE's buyback companies, and surely a reason these companies substitute repurchases for richly priced acquisitions.

Another buyback enthusiast is Warren E. Buffett, the noted Omaha investor. The company he controls, Berkshire Hathaway, is due to acquire 18% of Capital Cities in the ABC deal, and that will become his biggest investment. But right now his four largest common-stock holdings are in corporations that have also repurchased substantial amounts of stock: Geico, General Foods, Exxon, and Washington Post. The Exxon investment is new, built up only after the company started acquiring its shares in 1983. "A big reason I got in," Buffett says, "is that the company has recognized the values in its stock and been smart enough and pro-shareholder enough to repurchase it." On the other hand, Buffett has sold the stocks of certain companies because they would *not* make repurchases.

He is convinced, in fact, that the market discounts the prices of companies that should be making repurchases and don't, instead frittering their money away on acquisitions or other investments of far less value. The corollary, he says, is a markup in prices for companies that do repurchase shares, because investors identify the buybacks as a sign that management will be consistently inclined to act in the interests of shareholders. "All managements *say* they're acting in the shareholders' interests," he observes. "What you'd like to do as an investor is hook them up to a machine and run a polygraph to see whether it's true. Short of a polygraph, the best sign of a shareholder-oriented management—assuming its stock is undervalued—is repurchases. A polygraph proxy, that's what it is." (The article that follows describes one of Buffett's recent investing moves.)

A major question for the future is whether buybacks will serve investors as nobly as in the past. FORTUNE's figures suggest they may not. The evidence is in the 1983 data: for episodes of buying that took place in that year, the returns to shareholders have been terrible—well below results for the S&P 500. That may be because the buybacks need time to bear fruit. It may be also because a large batch of wrong companies—those whose shares are not really undervalued—have jumped into the game.

They could be making buybacks simply because these are in fashion. Or perhaps because they fear takeover. Some companies acknowledge that they are buying today to get the price of their stock up, hoping to discourage attacks from raiders looking for cheap merchandise. Though propping doesn't work well, companies that buy shares use up spare cash or untapped debt capacity and thereby presumably make themselves less appealing as takeover candidates.

THAT WHOLE PROPOSITION, however, is controversial, since certain other companies believe that buybacks increase the purchaser's vulnerability by shrinking its size, concentrating stock in the hands of institutions, and making the company generally an easier prize to grab. Harry S. Derbyshire, chief financial officer of Whittaker Corp., is of that persuasion, though Whittaker has nevertheless bought back about 10% of its stock over the past four years. Derbyshire says his company, a Los Angeles-based conglomerate, simply believes itself underleveraged and is buying to cure that condition. The investor relations director at another buyback company says he's sure that repurchases increase the risk of takeover. But his company, he says, is buying its stock anyway "because we're worth more than we're selling for."

He might be claiming that even if he didn't believe it. Nevertheless, that's the right kind of reason for repurchases, and it is also a distinct warning to the wrong companies buying for the wrong reasons. The purchase of overvalued stocks won't work any better for companies than it does for investors. But if the players in this game are companies sensitive to values, buybacks may continue to deliver sensational returns to shareholders who hang in for the ride.

CANNIBALS OF THE YEAR

■ FORTUNE's study of buybacks did not include repurchases made in 1984 because not enough time has elapsed to test their success. But here is a sampler of two dozen companies that made major repurchases during the year and might interest anyone inclined to invest in companies following buyback strategies. We've listed voluntary repurchasers only except for Houston Natural Gas, which is a hybrid: to remove a takeover threat, it bought 2.1 million of its shares from Coastal Corp. in a greenmail deal, but then picked up 5.6 million more in the open market. The percentage declines in shares are for calendar 1984 except for Color Tile (fiscal year ended June 30), SCOA (January 28), Levi Strauss (November 25), and Brown-Forman (nine months ended January 31).

The lead company, Teledyne, is an experienced cannibalizer of its shares, and so are Resorts International, Iroquois Brands, Colt, Tandy, Bandag, Color Tile, Crown Cork, International Controls, Levi Strauss, Crane, and Ralston. Among the others, SCOA, an Ohio-based retailer, is thought a candidate to be acquired or go private.

BIG BUYBACKS OF 1984

COMPANY	DECLINE IN SHARES OUTSTANDING
Teledyne	42.5%
Resorts International	31.4%
Iroquois Brands	27.3%
Integrated Resources	23.9%
FMC	23.9%
Houston Natural Gas	21.4%
Ethyl	18.9%
General Dynamics	18.0%
Colt Industries	17.7%
Mark Controls	17.0%
Tandy	15.1%
Celanese	13.8%
Bandag	13.4%
Color Tile	13.3%
SCOA	13.2%
Pennzoil	13.2%
Crown Cork & Seal	12.8%
Dart & Kraft	12.7%
Pioneer	12.6%
International Controls	12.5%
Levi Strauss	11.9%
Crane	11.6%
Ralston Purina	11.3%
Brown-Forman Distillers	11.2%

THE DOLLAR DAMPENS THE PROFIT PARTY

The U.S. economy zoomed last year. But import pressures and currency woes kept sales and profits of the largest U.S. industrial corporations from reaching orbit. This year's performance will hinge on the dollar's doings.

■ *by Myron Magnet*

High-margin models *like these Cadillacs and*

FOR ALL THE bugle-blowing, banner-flying ebullience of the U.S. economic recovery in 1984, the performance of the 500 largest U.S. industrial corporations was something of a letdown. The gross national product has exploded: measured from the prerecession peak of 1981, nominal GNP was up a vigorous 24% last year. But sales of FORTUNE 500 companies declined about 1% over the same period. Profits, though a record $86.4 billion, were only 2.6% above 1981—and were down when adjusted for inflation. What economic forces account for this lopsided performance? And what do they bode for America's largest industrial corporations in 1985 and beyond?

Sales of the 500 companies increased 4.3% last year over 1983, just about even with inflation. Although profits rose 25.6% during the year, the best improvement since 1979, that was little more than half the rate financial analysts were predicting back in January 1984. Economist Alan Greenspan reflects a widely held view: "The reported profits were less than one would expect from the buoyancy in the economy."

The powerful profit surge that analysts had foreseen did materialize in the beginning of 1984. But it stopped in midyear. The pause frightened some pessimistic economists into believing that the economy would drop into recession before the end of 1985.

Before that pause, phenomenal profits looked a sure thing. Industrial America's lean-and-mean movement had produced a rage of Indiana Jones-style cost slashing. Robots went in; vice presidents went out. Even after the end of the long, hard recession, managements continued to push wage restraint, work-rule concessions, and givebacks on dispirited unions (see The Economy).

The waning of inflation also helped lower corporate costs, as raw materials—copper, oil, wheat—fell in price. Righting other dislocations that had rocked business in the Seventies helped too. Manufacturers' spending for the pollution-control equipment they probably never wanted has leveled off. With 20 million once inexperienced baby-boomers and women now integrated into the work force, the Seventies' low productivity growth gave way last year to the 2.7% considered normal in the Sixties.

What went wrong, though, was the implacable rise of the U.S. dollar, which earlier had helped stoke the recovery to red-hot intensity. Attracted by high real interest rates, the stable political climate, and the dazzling economic growth, foreigners steadily bid up the currency as they clamored for dollar-denominated investments. Without last year's huge inflow of capital from these investors, the recovery would have advanced more sedately: the U.S. lacked sufficient savings to finance so exuberant an expansion along with so weighty a federal budget deficit. But as the

RESEARCH ASSOCIATES *Robert E. Norton, Kate Ballen*

Oldsmobiles being loaded onto a delivery truck at GM's plant near Pontiac, Michigan, helped give the company a record-profit year.

dollar strengthened—by 72% since the low of 1980, 12% in the second half of 1984 alone—it began to show its fangs.

Foreign-made goods cascading into the U.S. grew ever cheaper, forcing U.S. manufacturers to hold down prices. American-made exports grew dearer abroad, squashing demand, profit margins, or both. The large industrial corporations on the FORTUNE 500 list were particularly exposed: service companies, with no exports and no import competition, avoided the dollar's uncomfortable pressure.

This interplay of forces played tricks with the 500. Some industries boomed along with the economy's good news—autos, appliances, food, and publishing in particular. In spite of heavy competition from imports, the tire industry rolled up gripping profits and improved its potholed return on equity. But the strong dollar thinned the earnings of drug companies and reined in galloping paper and chemical profits. Some companies, such as makers of machine tools and heavy

PHOTOGRAPH BY ANTONIN KRATOCHVIL

construction equipment, the recovery simply passed by.

Big winners of the FORTUNE 500 were the car companies. General Motors, Ford, and Chrysler all ranked among the top five profit-makers on the list. The Big Three plus American Motors, which made money for the first time since 1979, raked in some $10 billion of profits, thanks partly to the import quotas binding their Japanese competitors. With unit growth barred, the Japanese strove to increase profits on each sale, shipping zippy-looking, high-margin cars that put no price pressure on U.S. manufacturers and that gave Japan's automotive industry, fiercely competitive at home, over three-quarters of its 1984 profits.

U.S. automakers took the same route since demand seemed inexhaustible, while supply was limited by a GM strike and delays in restarting recession-idled plants. Cars left the factories groaning under thousands of dollars of options. Pricing, coupled with a much publicized effort to streamline operations, gave GM (No. 2 among the FORTUNE 500) record profits of $4.5 billion on lower unit sales than in the late Seventies, while Ford (No. 4) boasted a profit gain of 56% to $2.9 billion. Chrysler's sales increased enough to advance it from No. 21 to No. 14 on the list, and its earnings soared 240% to $2.4 billion. (About half Chrysler's profit gain reflected the double magic of investment tax credits and tax-loss carry-forwards.)

This year, with import quotas lifted, Japan plans to send 24% more, mostly small, cars to the U.S. This will allow the Japanese to run their factories at peak efficiency, reap more small-car profits, and still keep prices high in the jazzy end of the market. Security analyst Maryann Keller of Vilas-Fischer, a New York brokerage house, expects the hotter competition in small cars to reduce U.S. automakers' 1985 profits by at least 10%.

RECOVERY-FLUSH consumers drove their new cars down to the appliance store to give that industry a record year. Insulated by manufacturing efficiency and customer brand loyalty, major-appliance makers have so far fended off Japanese prodding and poking at the low end of their market—except in microwave ovens, where a 30-competitor free-for-all has incinerated profits. With industry volume up 22% and margins enhanced by a glitzy array of space-age control panels, a company such as Magic Chef (No. 294) was able to serve up a profit gain of 114.7%. All this activity sated much demand, so this year's unit growth is bound to be less electrifying.

That flush feeling also sent consumers zipping past the austere black-and-white packages of generic products on their grocers' shelves toward the festively hued branded foods. Benefiting from the cheaper raw material prices that helped put debt-laden farmers into bankruptcy and onto the nightly news, food manufacturers such as Consolidated Foods (No. 49) and H.J. Heinz (No. 98) generated profit gains of over 10%. Earnings would have been more impressive, but the mature packaged-foods business is a fierce battle for market share, with the weapons of heavy advertising and new-product introductions wielded hardest when good times make the reward richest.

In 1984 these weapons worked for Kellogg. A new product launched every other month, reinforced by a ceaseless barrage of advertising, advanced its share of the cereal market from 35% to 41%. Revenue last year rose 9%, return on equity ran at a snap-crackle-and-pop 51%, and the company moved from No. 158 to No. 143 among the FORTUNE 500.

"There are very few food companies that aren't generating more money than they know what to do with," says William Leach, a financial analyst for the New York securities firm of Donaldson Lufkin & Jenrette. Some companies have turned their excess cash toward acquisitions, usually of other food companies—the Seventies trend toward diversification into toy or cosmetics companies appears to be over. Accordingly, Norton Simon disappears from this year's 500 list, gobbled by Esmark, which in turn vanishes

THE HIGHEST TOTAL RETURN TO INVESTORS

FINE RESULTS FROM A FOWL COMPANY

■ The FORTUNE 500 company kindest to its shareholders last year doesn't make semiconductors or high-tech weaponry. Its principal product, in fact, has been around at least since Noah. Tyson Foods, a family-run Alabama-based purveyor of poultry, ruled FORTUNE's roost in total return to investors (capital appreciation plus dividends) with a tidy 118% gain. Tyson, No. 364, can crow that its stock, traded over the counter, went from $16.50 a share to $36 during the year. Since the company plows profits back into the business, dividends were chicken feed: 8 cents a share.

A high-tech company had the lowest total return to shareholders. Storage Technology Corp., a manufacturer of computer disk drives beaten down by competition with IBM, went bankrupt and returned a negative 83.49%. Tosco, whose petroleum refining and oil shale extracting businesses were hurt by the oil glut, came in with the second-poorest performance last year—and the worst for the past ten years.

Tyson Chief Executive Don Tyson, 55, was in short pants when his father got the family into the poultry business in 1935 by trucking 500 Arkansas spring chickens to Chicago for a profit of $250. A company director at age 21, Tyson presciently noted that the path to stable poultry profits lay in avoiding the vagaries of raising and selling fresh chickens. ("Sell it or smell it" is the meatpackers' grim proverb.) He pushed Tyson Foods toward "further processed" products such as frozen parts and breaded patties, products that now account for 57% of revenues. Convenience-minded shoppers snapped up the more profitable offerings, and Tyson Foods was ready when fast-food operators flocked to chicken in the 1980s. The company is a major supplier of Chicken McNuggets, McDonald's hit finger food. Tyson Foods controls 5% of the U.S. poultry market, and with its January acquisition of Valmac Industries, a less profitable chicken producer, it will account for 7%.

"Don Tyson talks like a good ole boy from the South," says Walter Morris, a financial analyst with Strong Corneliuson Capital Management in Milwaukee. "But if there's a tenth of a penny to be made in a pound of chicken, this guy knows where it is." Tyson's profits were up 64% in 1984, atop average annual compound growth of 112% in the previous three years. Return on shareholders' equity last year was 21.5%, well above the average for the FORTUNE 500. Last year's stock performance was kindest of all to the Tyson family, which controls 62% of the shares. They made paper profits of about $95 million.

—Robert E. Norton

into the belly of Beatrice Foods, now No. 36.

Food companies also used excess cash to buy their own shares (see Money & Markets). Since 1982, 14 food companies have bought back 106 million shares worth nearly $4 billion, thereby raising earnings per share and allowing investors to pay taxes on the buyback proceeds at the capital gains rate rather than the higher rate imposed on dividends. This helped food stocks, a favorite parking place for unsettled investors, do splendidly in 1984's uninspired market, with a median total return to investors of 16.3%. An investor in the median FORTUNE 500 company would have had a loss of nearly 1%: once the bull market spurted up about two-thirds between August 1982 and May 1983, accomplishing in ten months what the typical postwar bull market achieved in 2½ years, it turned uncertain and began to fibrillate.

With advertising effervescent, newspaper publishers not only sold more space but sold it at higher rates. With a 48.8% earnings gain, Chicago-based Tribune Co. (No. 209) led a high-performance field. Publisher of 27 small-town dailies and No. 485 on last year's list, Harte-Hanks Communications departs the FORTUNE 500, taken private by its managers and founding families in the belief that the company was undervalued by the stock market. Magazines, like newspapers, got fatter in size and profits, though Time Inc. (No. 132), the publisher of FORTUNE, had one of the largest decreases in sales because it spun off its forest products company, Temple-Inland, a newcomer to the 500 list at No. 264.

HOW DID THE STRONG dollar torture the 500? Multinational companies—the FORTUNE 500 list has a high concentration of these—had profits stunted simply because the earnings of their overseas subsidiaries looked worse when translated into dollars and consolidated into the parent company's income statement than they looked before conversion. The British pound's 15.7% drop against the dollar in 1984, for example, turned the solid 26% revenue growth of IBM's U.K. division, measured in pounds, into a more modest 10% when converted to dollars.

This problem waylaid the consumer packaged goods industry, which otherwise had almost everything going for it. Companies enjoyed their strongest unit sales growth in years. Packaging costs fell decisively, and trucking costs dropped some 15%, thanks to government deregulation.

Still, profits languished, with soap companies squeaking by with a 1.2% increase. Industry leader Procter & Gamble put a pricing squeeze on competitors for most of the year, trying to wrest market share. And an unusually large lineup of new-product introductions required vast amounts of advertising and promotion investment, which should pay off handsomely this year and next. But the strong dollar, says financial analyst Hercules A. Segalas of Drexel Burnham Lambert, a New York investment firm, "was clearly a killer." Besides helping to inflict a 63.3% earnings decline on Colgate-Palmolive, about half of whose business is overseas, it gouged most other packaged goods companies, which typically get some 20% of their earnings from abroad. "A lower dollar," says Segalas, "would be a panacea. You would see much higher than anticipated earnings."

Clorox (No. 307) was a consumer products success story. The company exports little of its bleach and so posted an earnings gain of 21.7%. Since its main product is 94% water, Clorox's principal material cost is its plastic bottle, made from ever cheapening oil.

Foreign-earnings translation problems made the drug industry's already lackluster 1984 even duller. The companies on the 500 list lacked blockbuster new drug introductions to boost sales and profits, and the strong dollar ground down reported profits from overseas, typically 35% of their business. The companies propped up earnings by raising domestic prices twice as much as the general inflation rate.

The tire industry overcame the challenge of cheap imports. A surge of 30 million low-priced passenger tires from abroad in 1984, vs. 23 million in 1983, not only prevented price increases but forced average prices down nearly 2%. Improved efficiency, coupled with the declining price of oil, on which 80% of tire raw material is based, brought rubbermakers a profit increase of 31.5%, nonetheless. This was not enough to inflate tiremakers' return on stockholders' equity to full pressure. In 1984 it was 12.1% vs. 13.6% for the median 500 industrial company.

This year may be tougher for the tiremakers, according to security analyst Saul H. Ludwig of Roulston & Co., a Cleveland-based brokerage house. Demand has slackened,

THE BIGGEST TURNAROUND

A FEW ADJUSTMENTS—AND SHAZAM!

U.S. Steel, the FORTUNE 500's biggest money loser in 1983—with a $1.2-billion loss—rolled back to profitability last year. It earned $493 million—No. 37 in profits among the 500—on revenues of $19 billion. But 1984's biggest turnaround didn't come from some miraculous recovery in the steel business. Nor did great profits spurt from oil, which has been Big Steel's biggest product line since it bought Marathon Oil in 1982. Rather, most of the earnings can be attributed to a gallimaufry of nonoperating items, from asset sales to accounting adjustments.

Last year U.S. Steel (ranked No. 15 in sales) took in $265 million before taxes by selling off coal and oil properties, two barge lines, and other things. It also earned money by trimming inventories, which, under its accounting method, charged older, lower costs against sales. The company boosted income by changing the actuarial assumptions and interest rate forecasts that determine how much is put in its pension funds. And it profited by repurchasing old debt for less than its book value. Merrill Lynch security analyst Charles Bradford painstakingly refigured U.S. Steel's income statement and concluded that only $157 million in profits came from operations. The other items "are all clearly legal," he says. "But they're not quality earnings."

Chief Executive David Roderick is unfazed by carping about the accounts. He says that his reorganization of U.S. Steel, in its fourth year and more than half completed, "is working, and working very well." He notes that most other large steelmakers lost tons of money in 1984. With import quotas now in place in the U.S., Roderick forecasts better results for 1985. Besides, he says, Marathon's energy revenues provide "a tremendous anchor to windward that our competitors don't have. We're not on the verge of any financial problems; we have good liquidity, we're paying down debt, and we're reducing our lines of credit." He seems confident earnings this year will be more to Wall Street's liking. **—Robert E. Norton** raising worries that many of last year's tires were bought by bargain-conscious dealers now sitting on big inventories. That would bode ill for 1985's performance. Meanwhile, tiremakers are working not just to beat foreign importers but to join them: half the 1984 imports were made in overseas plants owned by U.S. companies.

BOOMING DEMAND, cheaper raw materials, and stringent cost cutting in 1981 and 1982 spurred the chemical industry to profit gains of 23.1%. But financial analysts say that with a cheaper dollar profits would have been steeper still, raising the industry's 12.2% return on shareholders' equity. Imports held price rises well below the inflation rate, especially since cost-conscious customers at auto, steel, and detergent companies are routinely on the prowl for the cheapest supplies. Under the Darwinian competition of the Eighties, traditional friendly relations between chemical supplier and customer have begun to crumble—the principal casualty being Union Carbide (No. 35), whose troubles didn't start with the Bhopal disaster in December: it had already lost its position as the premier supplier of commodity chemicals and gases to heavy industry. As for Dow Chemical (No. 25), with half its profits coming from foreign subsidiaries, it felt the dollar jolt most sharply.

In comparison with a mediocre 1983, the paper industry, long the world's low-cost producer, had a sensational year. For makers of certain specialty papers in high demand—Consolidated Paper, for instance, with earnings up 65%—it was spectacular. Return on equity for the industry, though, was a below-average 12.4%.

By the third quarter, however, cheapening imports started skimming off some earnings in such commodity categories as uncoated business paper and cardboard for cartons. U.S. producers couldn't raise prices, and their factory operating rates fell as imports ate into their share of the market. So International Paper, after investing $4 billion since 1979 to become the low-cost producer of commodity items, earned only 3.6% on stockholders' equity in last year's boom. With this trend continuing, Thomas P. Clephane, financial analyst at the investment banking firm of Morgan Stanley, expects 1985 industry earnings to drop 14%. "This is still a shocking concept," he says. "This is an industry that recently was thinking it was headed up 20% to 30%."

The big business news of late 1984 was the computer and high-technology shock. Until December the computer business was going straight up as manufacturers put the hard sell on customers whose expansionary visions made them easy to convince. But in December, as Morgan Stanley security analyst Ulric Weil puts it, "cracks began to appear." Apple Computer's sales seemed to hit a wall right after Christmas, and Wang Laboratories allowed that its December orders had been disappointing. Both companies have since announced temporary plant closings.

Problems with the translation of foreign earnings hit IBM, Digital Equipment, and Honeywell. For the third year running, IBM piled up more profits than any other FORTUNE 500 company—$6.6 billion. But the dollar kept what otherwise would have been a 25% increase down to 20%, and the computer colossus blames currency translation for its earnings decrease in the first quarter of 1985.

Businesses may have ordered computers at a breakneck pace in 1984, expecting economic growth to keep mushrooming, Weil says. But when the economy slowed, computer orders dried up. This is not good news for late entrants to the field, such as AT&T, which having been shorn of its local telephone companies is now an industrial corporation rather than a utility and makes its first appearance on the 500 list (as No. 8). Overenthusiastic computer retailers may have overbought along with corporate buyers: Apple had one of the ten biggest increases in sales on the 500 list in 1984, but many of the computers it sold are still sitting on the shelves of the dealers who bought them.

WHEN COMPUTER companies got premonitions that demand for their products wasn't infinite, they stopped ordering electronic components, which until then they had been stockpiling in fear of shortages. This gave the semiconductor and components industry what Merrill Lynch security analyst Thomas Kurlack calls "a Dr. Jekyll and Mr. Hyde year." Orders for semiconductors, which hurtled upward 66% in the first quarter of 1984, were plummeting at a 31%

THE BIGGEST MONEY LOSER

LAWSUITS BY THE THOUSAND

A.H. Robins Co. has been operating under a cloud since the Dalkon Shield, an intrauterine birth-control device it manufactured until 1974, was found to cause serious illness or even death to some users. By the end of 1984 the Richmond, Virginia, pharmaceutical company had settled about 8,300 damage claims for $314.6 million. But more than 4,000 cases are still pending and new claims are now being filed at the rate of about 300 per month. Investors have kept the stock price depressed for a decade. To help ease Wall Street fears, the company set up a reserve of $615 million to handle future compensatory claims—an amount extrapolated from the cost of claims already settled. Robins charged the reserve against fourth-quarter earnings, which helped make the company the biggest money loser of this year's FORTUNE 500.

With a $461.6-million deficit, Robins didn't do as badly as the biggest loser in the five previous years. Each of them—U.S. Steel, International Harvester, Ford, and Chrysler (twice)—reported losses of more than $1 billion. Robins was one of only 34 among the 500 to lose money in 1984, vs. 60 companies the year before. If it weren't for its mounting legal problems, Robins, the maker of Robitussin cough syrup, Chap Stick lip balm, and a variety of prescription drugs, would have had a reasonably good 1984. Sales increased 12% to $631.8 million and operating earnings jumped 21% to $128.1 million. G.E.R. Stiles, Robins's chief financial officer, says the company will report a profit for the first quarter of 1985. But an upcoming case in Virginia federal court will be instrumental in determining the company's future. Robins has asked the court to consider as a group all the lawsuits that seek punitive damages—generally awarded when a defendant is found to have acted recklessly. The company wants the court to set a total amount for punitive damages if it is held liable. Robins now has a negative net worth and limited resources to satisfy claims. So without such a ruling, the drain on its treasury would be unpredictable as cases slowly wind through local courts all over the U.S. **—Kenneth Labich**

ANDREW MOOR

Now that currency shifts *powerfully influence profits, Eastman Kodak has a currency trading room at its Rochester, New York, headquarters.*

rate by the fourth quarter, as shakeouts in the U.S. personal computer industry and the Japanese videocassette-recorder business further squelched demand. Toward the end of 1984 a price war erupted, dropping memory chip prices 54%. In the fourth quarter, says Vice President G. Dan Hutcheson of VLSI Research, a Silicon Valley market research firm, the chipmaking business "went into hypothermia."

NEVERTHELESS, so superheated was the first half of 1984 that for the full year semiconductor sales rose 39%, providing companies like Advanced Micro Devices, a new arrival to the list at No. 424, with record earnings. AMD also had the highest total return to investors over the past decade. Intel, whose full-year earnings were 70% higher than in 1983, went up like a rocket and came down like the dead booster. Earnings for the first quarter soared 302% compared with the previous year; the fourth quarter was 50% below 1983's last quarter.

Basking in the Reagan military buildup, such defense electronics companies as Litton, TRW, and Westinghouse Electric did well. The companies that make the aircraft to carry high-tech war equipment—such as General Dynamics, McDonnell Douglas, and Lockheed—also flourished. But with commercial airplane deliveries at a 20-year low due to post-deregulation turmoil in the airline industry, Boeing (No. 29) scarcely made any money in the nonmilitary part of its business. Boeing earned $17 million in operating profits on its $5.5 billion of commercial sales, vs. $477 million on its $4.5 billion of military sales.

The continuing defense buildup augurs well for these companies, though congressional outrage over $436 hammers, General Electric's temporary suspension for alleged overcharging, and the loss by Pratt & Whitney, a United Technologies unit, of some of its fighter plane engine contracts to GE presage a less relaxed era (see Politics & Policy). Potentially more important, the Strategic Defense Initiative—Star Wars—could portend a military research and development push not seen for two decades. This could produce a rich, fertilizing stream of technology for the private sector, just as the Minuteman II missile program helped ignite the semiconductor revolution in 1962. Wolfgang H. Demisch, a security analyst with First Boston, a New York investment bank, says that this is how the U.S. government fosters quantum leaps in computer development: "We just scare the daylights out of everybody and say, 'We need it.' "

Some companies weren't just shaved by the dollar; they were slashed by it. Take farm machinery makers. Deere & Co. (No. 86) tried to deal with its foreign competitors by co-opting them: its small tractors are now made by a Japanese supplier, its medium ones by a German company, leaving only the

MICHAEL A. MURPHY

Clad in Deere & Co. clothing, *the little tractor was made in Japan, the intermediate one in West Germany, and the largest in Iowa.*

behemoths to be made in the U.S. But nothing could help farm equipment companies when the strong dollar, and an obsolete farm policy that seems designed to preserve family farmers like snail darters, priced U.S. farm products out of the world market, even while prices in dollars are unusually low. Under such conditions farmers don't buy anybody's tractors.

Machine tool makers have had dollar troubles ever since the currency's big rise started in 1980. Huge, unmeetable demand when the car and oil industries were booming in 1979 called foreign makers into the U.S. market. They stayed—their products growing ever cheaper. In 1982 they had under 30% of the market; in 1984, over 40%. With orders still way under half what they were five years ago, 1984 was gloomy and this year looks no brighter. Cincinnati Milacron (No. 395), for instance, earned a paltry $1.2 million on its machine tool division's $312 million in sales.

As if by enchantment, the world oil glut stopped the building of huge petrochemical plants in the Middle East, and high interest rates slowed construction in the U.S. With that, the heavy construction equipment business has been cut in half. Tough competitors like Japan's Komatsu have gulped much of the business overseas. For the third year in a row, Caterpillar lost money, twice as much as in 1982. Bucyrus-Erie sinks off the list: plant closings and divestitures reduced revenues to $407 million, even below the company's 1976 sales.

The steel industry hasn't had an export market in a decade; its dollar problem is cheap imports, which jumped 53% last year, chopping $1.8 billion off the earnings of U.S. steelmakers. Foreign companies, trying to raise export tonnage before it got frozen by

HIGHEST RETURN ON STOCKHOLDERS' EQUITY

ESOP'S FABLE: THE RISE OF WEIRTON STEEL

It isn't often that a company comes along with a return on shareholders' equity of 100%—the highest by far of any company on this year's FORTUNE 500. But then Weirton Steel Corp. (No. 289) is no ordinary company. A division of National Steel until January 11, 1984, Weirton is entirely owned by its workers under an Employee Stock Ownership Plan (ESOP), which grants stock to employees and gets tax benefits that help pay off loans or finance capital expenditures.

Weirton earned $60.6 million on sales of $1 billion in 1984, its first year as an employee-owned enterprise. Under the terms of the ESOP, it had no shareholders' equity at the start of the workers' buyout. Since Weirton paid no dividends, last year's earnings have all been retained and now *are* the shareholders' equity. Hence the 100% return on equity.

By other measures of performance, the company also looks good. Largely because Weirton whacked its labor costs down by 32%, it was one of only two integrated steelmakers among the FORTUNE 500 corporations to report any profit at all last year, and the company's return on sales was 5.6%, above the FORTUNE 500 average of 4.5%. **—Anne B. Fisher** the recently imposed quotas, account for part of the surge. Mostly because integrated steelmakers took massive write-offs in 1983, they did somewhat better in 1984, often by decking out their income statements with a garnish of accounting tinsel (see box, page 256). The new quotas should help profits: imports dropped 23% from January to February and the limit on volume will encourage exporters to keep prices high. "U.S. steelmakers have had protection measures since 1969," says Merrill Lynch investment analyst Charles Bradford, "and every time they come off, the companies are worse off than before."

Yet mini-mills, outfits that melt scrap steel into bars in up-to-date plants manned by efficient employees, competed handily with imports last year. Nucor, owner of several such mills, boasted a 59.9% earnings rise in 1984 and earned 14.9% on equity.

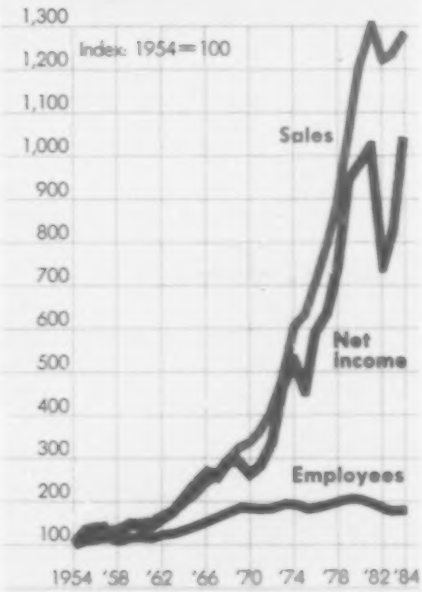
What the fall in world oil prices has done to oil companies—12 of the top 20 on FORTUNE's list—is an object lesson in the mutability of what once seemed as fixed as fate. By the time OPEC, taking advantage of an approaching world petroleum scarcity, had pushed the market price from 1972's $2.50 a barrel or so to 1980's $40 peak, oil had become so expensive to use for firing boilers that many industries and utilities painfully converted to other fuels. Consumers, meanwhile, bought more efficient cars and insulated their houses. Demand fell 15% from 1979 to 1984, dropping the price to $29, from which Wall Street expects it to fall further. A likely price, thinks Morgan Stanley's oil industry analyst Barry Good, is $20—or less. (For a contrary view, see Fortune Forecast.)

With money gushing in from 1980 to 1982, the oil industry went on a binge of spending for exploration and acquisition. In 1984 cost control, shutting down, spinning off, and writing off were the order of the day. Atlantic Richfield took a write-down of $515 million in anticipation of the sale of its metals business; Texaco took a write-down of $765 million for tankers, refineries, and reserves, depressing profits 75%. This spring Standard Oil of Ohio announced the closing of a big copper business in its Kennecott division.

For sheer drama, no restructuring can touch the three megamergers of Texaco and Getty, Chevron and Gulf, and Mobil and Superior. With many oilmen thinking the stock market was low in comparison with corporate asset values, the cliché was that you could find oil cheaper on Wall Street than in the oil patch. Barry Good figures that for Texaco, whose worldwide after-tax finding cost is around $10 a barrel, getting oil on the Street for less than $5, as it did in the Getty deal, was a bargain. But for Exxon, whose worldwide after-tax finding cost is probably still less than that bargain price, the cheapest way to buy oil was to buy its own shares, which along with Standard of Indiana and Standard of Ohio it did heavily last year. As oil prices have come down, the megamergers have started to look a little less wonderful. Perhaps that's one reason the stock market dropped the prices of Texaco, Chevron, and Mobil shares last year, while the prices of the other major oil companies rose.

For the rest of this year and next, the profits of the FORTUNE 500 will probably swing largely to the dollar's rhythm. Some of the best news of 1984 was that the dollar's strength prevented the industrial companies from falling into bad old habits—soaring labor costs, unnecessary plant expansion—during the recovery. "When the dollar was weak in the Seventies, companies paid attention only to price, not costs and productivity, and so lost position in the world," says Robert S. Salomon Jr., a managing director of Salomon Brothers, a New York investment bank. "The dollar at high levels serves as a disciplinary mechanism." Many FORTUNE 500 companies believe they have had sufficient discipline. Now they'd like to see the dollar fall, so they can reap the benefits.

THE 500 THROUGH THE YEARS



Record profits *and burgeoning sales, says the chart. But sales are lower than in 1981 and, adjusted for inflation, so are profits.*

. . . AND RECENT PERFORMANCE

	1984	1983
Sales (billions)	**$1,758.7**	**$1,686.7**
Change in sales	**4.27%**	**.87%**
Profits (billions)	**$86.4**	**$68.8**
Change in profits	**25.6%**	**12.1%**
Assets (billions)	**$1,409.4**	**$1,353.9**
Number of sales increases	**429**	**322**
Number of profit increases	**367**	**329**
Number of money losers	**34**	**60**
Median return on sales	**4.5%**	**3.8%**
Median return on equity	**13.6%**	**10.7%**
Median total return to investors	**–.75%**	**30.21%**
Number of employees (millions)	**14.2**	**14.1**

Going nowhere *in a boom, shares in the 500 industrial companies returned less than nothing to investors in 1984. The median return on stockholders' equity moved ahead smartly, to 13.6%, though that's not as high as returns in the early Eighties. Employment barely budged.*

THE 500 LARGEST U.S. INDUSTRIAL CORPORATIONS, RANKED BY SALES

RANK 1984	RANK 1983	COMPANY	SALES $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
1	1	**Exxon** (New York)	90,854,000*	63,278,000	1	5,528,000	2	28,851,000	1
2	2	**General Motors** (Detroit)	83,889,900	52,114,900	2	4,516,500	3	24,214,300	3
3	3	**Mobil** (New York)[1]	56,047,000*	41,851,000	4	1,268,000	13	13,634,000	6
4	4	**Ford Motor** (Dearborn, Mich.)	52,366,400	27,485,600	8	2,906,800	4	9,837,700	13
5	6	**Texaco** (Harrison, N.Y.)[2]	47,334,000	37,744,000	6	306,000‡	62	13,107,000	7
6	5	**International Business Machines** (Armonk, N.Y.)	45,937,000	42,808,000	3	6,582,000	1	26,489,000	2
7	7	**E.I. du Pont de Nemours** (Wilmington, Del.)	35,915,000	24,098,000	11	1,431,000	11	12,233,000	11
8	●	**American Tel. & Tel.** (New York)	33,187,500	39,826,600	5	1,369,900	12	13,762,900	5
9	10	**General Electric** (Fairfield, Conn.)	27,947,000	24,730,000	10	2,280,000	6	12,573,000	8
10	8	**Standard Oil (Indiana)** (Chicago)	26,949,000*	25,734,000	9	2,183,000	7	12,524,000	9
11	9	**Chevron** (San Francisco)[3,4]	26,798,000	36,358,000	7	1,534,000	9	14,763,000	4
12	12	**Atlantic Richfield** (Los Angeles)	24,686,000	22,130,000	13	567,000	30	9,948,000	12
13	13	**Shell Oil** (Houston)	20,701,000*	23,729,000	12	1,772,000	8	12,512,000	10
14	21	**Chrysler** (Highland Park, Mich.)	19,572,700	9,062,700	31	2,380,000	5	3,305,900	36
15	15	**U.S. Steel** (Pittsburgh)	18,274,000	18,989,000	14	493,000**	37	5,722,000	19
16	18	**United Technologies** (Hartford)	16,331,757	9,904,536	25	645,015	24	4,169,450	26
17	16	**Phillips Petroleum** (Bartlesville, Okla.)	15,537,000	16,965,000	17	810,000	18	6,624,000	16
18	14	**Occidental Petroleum** (Los Angeles)	15,373,000	12,273,100	20	568,700	29	2,903,600	42
19	19	**Tenneco** (Houston)	14,779,000	18,205,000	15	631,000	25	6,153,000	17
20	17	**Sun** (Radnor, Pa.)	14,466,000	12,789,000	19	538,000	31	5,272,000	21
21	20	**ITT** (New York)	14,000,988	13,277,188	18	448,046	43	6,032,662	18
22	22	**Procter & Gamble** (Cincinnati)[5]	12,946,000	8,898,000	32	890,000	16	5,080,000	22
23	23	**R.J. Reynolds Industries** (Winston-Salem, N.C.)	11,902,000¶*	9,272,000	29	1,210,000	14	4,478,000	25
24	25	**Standard Oil (Ohio)** (Cleveland)	11,692,000	17,487,000	16	1,488,000	10	8,390,000	14
25	28	**Dow Chemical** (Midland, Mich.)	11,418,000	11,419,000	21	585,000	27	5,062,000	23
26	29	**Allied** (Morris Township, N.J.)	10,864,000	8,189,000	34	488,000	40	3,043,000	40
27	31	**Unocal** (Los Angeles)	10,838,400	10,202,000	24	700,400	21	5,694,300	20
28	30	**Eastman Kodak** (Rochester, N.Y.)	10,600,000	10,778,000	22	923,000	15	7,137,000	15
29	27	**Boeing** (Seattle)	10,354,000	8,485,000	33	787,000	19	3,695,000	32
30	34	**Westinghouse Electric** (Pittsburgh)	10,264,500	9,150,400	30	535,900	32	3,740,800	31
31	32	**Goodyear Tire & Rubber** (Akron, Ohio)	10,240,800	6,194,300	42	411,000	47	3,171,300	39
32	35	**Philip Morris** (New York)	10,137,800*	9,339,200	28	888,500	17	4,092,900	28
33	33	**Dart & Kraft** (Northbrook, Ill.)	9,758,700	5,284,900	55	455,800	42	2,398,000	49
34	42	**McDonnell Douglas** (St. Louis)	9,662,600	6,191,300	43	325,300	56	2,343,800	56
35	37	**Union Carbide** (Danbury, Conn.)	9,508,000	10,518,000	23	323,000	57	4,924,000	24
36	36	**Beatrice Foods** (Chicago)[7]	9,327,000	4,464,000	66	433,000	45	2,028,000	69
37	43	**Rockwell International** (Pittsburgh)[8]	9,322,100	5,869,500	47	496,500	36	2,521,600	52
38	38	**Xerox** (Stamford, Conn.)	8,971,300	9,537,100	27	290,500	64	4,101,000	27
39	41	**General Foods** (Rye Brook, N.Y.)[8]	8,599,754	4,431,782	67	317,105	58	2,040,180	67
40	44	**PepsiCo** (Purchase, N.Y.)	8,427,994	4,950,234	57	212,547	87	1,853,376	76
41	39	**Amerada Hess** (New York)	8,277,184	6,352,832	39	170,455	109	2,573,218	50
42	45	**Ashland Oil** (Russell, Ky.)[8]	8,252,564	4,036,941	74	(172,478)	474	845,899	171
43	50	**Lockheed** (Burbank, Calif.)	8,113,400	3,165,600	99	344,100	53	1,151,900	122
44	46	**General Dynamics** (St. Louis)	7,839,000	3,034,800	10[illegible]	381,700	51	1,062,100	134
45	47	**Minnesota Mining & Manufacturing** (St. Paul)	7,705,000	6,094,000	44	773,000	20	3,814,000	30
46	48	**Coca-Cola** (Atlanta)	7,363,993	5,958,069	45	628,818	26	2,778,066	47
47	51	**Ge[illegible]-Pacific** (Atlanta)	7,128,000	4,785,000	59	119,000	144	2,035,000	68
[illegible]	[illegible]	[illegible][10]	7,046,100	6,926,000	35	(378,200)	482	1,366,200	98
49	49	[illegible]**ed Foods** (Chicago)[8]	7,000,310	2,821,757	107	188,441	100	956,908	153
50	53	[illegible]**race** (New York)	6,727,800	5,328,000	54	195,600	94	2,197,400	61

THE DEFIN[illegible] AND CONCEPTS UNDERLYING THE FIGURES IN THIS DIRECTORY ARE EXPLAINED ON PAGE 316.

● Indicates th[illegible] corporation was not among the 500 in 1983.

¶ Includes sales from discontinued operations of at least 10%; see the explanation of "sales" on page 316.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

‡ Reflects an extraordinary charge of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

§ Dividends paid by company on its mandatory red[illegible]emable preferred stock were subtracted from net income in calculating this figure.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
150,000†	10	6.1	145	19.2	85	6.77	5.78	3.51	6.79	231	29.36	31	18.85	220	29
748,000†	1	5.4	186	18.7	97	14.22	11.84	3.27	15.83	77	14.36	113	17.76	233	40
178,900	8	2.3	386	9.3	342	3.11	3.70	2.57	1.93	302	2.00	202	18.93	216	29
383,700†	3	5.6	176	29.6	17	15.79	10.29	2.06	22.60	30	11.21	132	16.62	256	40
68,088	46	0.7	432	2.3	437	1.03‡	4.80	5.84	(15.93)	383	3.48	190	13.34	319	29
394,930	2	14.3	8	24.9	28	10.77	9.04	3.12	13.20	113	4.28	183	15.77	274	44
157,783	9	4.0	286	11.7	290	5.93	4.70	2.73	8.05	219	0.77	217	10.73	355	28
365,000	4	4.1	276	9.1§	345	1.25	0.13	5.27	(13.40)	381	8.42	154	11.75	343	36
30,000†	5	8.2	70	18.1	107	5.03	4.45	1.67	11.66	147	0.00	226	17.64	236	36
53,581	62	8.1	77	17.4	125	7.70	6.39	3.43	8.42	214	10.10	143	14.56	295	29
37,761	101	5.7	166	10.4	319	4.48	4.65	2.87	4.55	275	(2.82)	257	17.47	240	29
39,400	94	2.3	383	5.7	403	2.21	6.03	2.09	0.56	316	8.96	151	11.36	350	29
34,699	112	8.6	53	14.2	225	5.73	5.28	2.30	9.55	191	44.06	15	21.88	174	29
100,435†	18	12.2	20	72.0	2	11.88	5.79**	(0.92)	—		18.01	89	18.65	223	40
88,753†	27	2.7	360	8.1§	362	3.52**	(12.07)	7.81	(7.66)	369	(10.70)	328	6.39	397	29
205,500	7	4.0	288	15.5	183	4.90	3.97	1.65	11.47	151	3.79	186	21.10	184	41
29,300	132	5.2	197	12.2	274	5.26	4.71	2.65	7.10	229	36.52	22	12.08	340	29
40,630	91	3.7	307	11.3§	298	3.08	2.03**	4.74	(4.22)	347	22.61	62	16.28	263	10
98,000	22	4.3	262	9.3§	344	4.01	4.75	4.08	(0.17)	323	(0.72)	234	11.69	344	29
37,000	104	3.7	304	10.2	327	4.67	3.84	3.92	1.77	303	10.69	138	15.74	275	29
252,000	6	3.2	333	7.4	374	2.97	4.50	3.63	(1.99)	334	(29.17)	417	14.88	287	36
61,700	51	6.9	116	17.5	122	5.35	5.22	1.92	10.76	164	4.62	182	7.29	390	43
97,551	23	10.2	38	25.8§	24	10.27	7.25	3.49	11.38	153	29.22	32	16.92	249	21
44,200	79	12.7	17	17.7	116	6.14	6.14	1.01	19.81	45	(0.22)	229	14.77	290	10
49,800	69	5.1	205	11.6	292	3.02	1.71**	3.01	0.02	320	(12.21)	341	4.79	411	28
114,500	15	4.5	241	13.3§	251	5.03	0.09	3.62	3.34	291	(2.47)	252	11.65	346	28
20,664	180	6.5	124	12.3	271	4.03	3.60	2.23	6.10	246	20.16	74	17.82	232	29
123,900	14	8.7	52	12.9	259	5.71	3.41	3.90	3.89	285	(0.92)	237	5.50	406	38
86,600†	30	7.6	96	21.3	49	8.09	3.67	0.76	26.68	19	32.63	26	36.85	26	41
126,849†	13	5.2	196	14.3	218	3.04	2.54	0.15‡	34.66	6	(1.00)	238	24.14	136	36
133,271†	12	4.0	283	13.0	256	3.87	3.06**	2.18	5.91	248	(9.47)	316	14.15	305	30
68,000	47	8.8	50	21.7	41	7.24	7.17	1.57	16.48	71	16.93	97	16.38	259	21
72,286†	43	4.7	234	17.5	121	9.02	7.92	3.41[6]	10.22	172	34.17	23	15.51	276	20
88,391	28	3.4	326	13.9	237	8.10	6.91	2.77	11.33	154	24.59	53	27.24	82	41
98,366	21	3.4	325	6.6	393	4.59	1.13‡	8.69	(6.18)	359	(36.02)	440	5.10	409	28
72,000	44	4.6	235	21.4	47	3.99	0.27	1.55	9.92	180	(6.90)	292	12.48	334	20
105,759	16	5.3	189	19.7	75	3.25	2.52	1.03	12.12	135	(5.02)	270	26.27	98	41
103,457	17	3.2	331	5.9§	399	2.53	4.42	4.18	(4.90)	353	(17.42)	368	1.59	432	38
55,000	59	5.7	308	15.5	181	6.10	5.73	2.40	9.78	183	13.58	117	18.22	228	20
150,000	11	2.5	370	11.5	295	2.25	3.01	1.23	6.23	242	16.44	99	16.34	261	49
8,806†	316	2.1	393	6.6	392	2.01	2.43	2.35	(1.56)	333	(12.16)	340	16.75	253	29
33,900	114	—		—		(7.40)	2.46	2.97	—		(10.18)	321	14.89	286	29
81,300	35	4.2	266	29.9	13	5.28	4.18	0.68	22.75	28	11.12	134	43.41	14	41
99,000	20	4.9	222	35.[illegible]	9	8.08	5.30	1.01	23.09	26	21.29	71	35.10	33	41
86,707	29	10.0	40	20.3	64	6.27	5.67	2.66	8.95	206	(0.58)	231	9.62	369	38
40,500	92	8.5	54	22.6	32	4.76	4.10	1.64	11.24	156	21.75	67	14.08	306	49
40,000	93	1.7	409	5.2§	410	0.97	0.97	1.79	(5.95)	358	3.84	185	8.65	377	26
58,600	55	—		—		(5.84)	(3.64)‡	10.32**	—		(45.24)	454	2.47	429	33
90,900	26	2.7	361	19.7	74	3.25	2.88	1.20	10.43	169	27.12	39	24.52	127	20
80,000	37	2.9	348	8.9	352	4.02	3.28	4.02	0.00	321	(5.97)	285	12.62	332	28

[1] Figures include Superior Oil (1983 rank. 196) acquired September 28, 1984.

[2] Figures include Getty Oil (1983 rank: 24) acquired February 17, 1984.

[3] Name changed from Standard Oil of California July 1, 1984.

[4] Figures include Gulf Oil (1983 rank: 11) acquired June 15,1984.

[5] Figures are for fiscal year ended June 30, 1984.

[6] Figure is for Kraftco.

[7] Figures are for fiscal year ended February 29, 1984.

[8] Figures are for fiscal year ended September 30, 1984.

[9] Figures are for fiscal year ended March 31, 1984.

[10] Figures include Republic Steel (1983 rank: 145) acquired June 29, 1984.

RANK		COMPANY	SALES	ASSETS		NET INCOME		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
51	52	**Monsanto** (St. Louis)	**6,691,000**	**6,373,000**	38	**439,000**	44	**3,634,000**	33
52	64	**Caterpillar Tractor** (Peoria, Ill.)	**6,576,000**	**6,223,000**	41	**(428,000)**	483	**2,852,000**	43
53	55	**Anheuser-Busch** (St. Louis)	**6,501,200***	**4,524,700**	64	**391,500**	49	**1,951,000**	73
54	56	**Nabisco Brands** (Parsippany, N.J.)	**6,253,100**	**3,761,200**	79	**308,900**	61	**1,544,200**	89
55	58	**Coastal** (Houston)	**6,225,362**	**3,295,733**	91	**101,716**	164	**577,886**	222
56	60	**Honeywell** (Minneapolis)	**6,138,300**	**4,759,800**	61	**239,000**	76	**2,380,900**	55
57	57	**Johnson & Johnson** (New Brunswick, N.J.)	**6,124,500**	**4,541,400**	63	**514,500**	33	**2,932,000**	41
58	59	**Raytheon** (Lexington, Mass.)	**6,104,159**	**3,600,118**	82	**243,242**	73	**1,979,203**	72
59	63	**TRW** (Cleveland)	**6,061,691**	**3,480,615**	85	**266,842**	67	**1,758,328**	79
60	75	**Hewlett-Packard** (Palo Alto, Calif.)[11]	**6,044,000**	**5,153,000**	56	**665,000**	23	**3,545,000**	34
61	54	**Signal Companies** (La Jolla, Calif.)	**6,005,000**	**5,511,000**	51	**285,000**	65	**2,805,000**	45
62	65	**Aluminum Co. of America** (Pittsburgh)	**5,750,800**	**6,341,900**	40	**256,000**	69	**3,343,600**	35
63	77	**Texas Instruments** (Dallas)	**5,741,600**	**3,423,400**	86	**316,000**	59	**1,540,500**	90
64	62	**General Mills** (Minneapolis)[12]	**5,600,800**	**2,858,100**	106	**233,400**	78	**1,224,600**	112
65	84	**Digital Equipment** (Maynard, Mass.)[5]	**5,584,426**	**5,593,253**	50	**328,779**	55	**3,979,216**	29
66	70	**Weyerhaeuser** (Tacoma, Wash.,	**5,549,738**	**5,957,723**	46	**226,187**	80	**3,188,352**	38
67	81	**Motorola** (Schaumburg, Ill.)	**5,534,000**	**4,194,000**	71	**387,000**	50	**2,278,000**	59
68	69	**Bethlehem Steel** (Bethlehem, Pa.)	**5,392,100**	**4,387,300**	69	**(112,500)****	471	**1,157,000**	121
69	66	**Sperry** (New York)[9]	**5,237,900**	**5,502,600**	52	**216,200**	85	**2,802,900**	46
70	86	**Champion International** (Stamford, Conn.)[13]	**5,121,089**	**6,815,396**	37	**(5,968)**	454	**2,496,837**	53
71	76	**Control Data** (Minneapolis)	**5,026,900**	**9,588,900**	26	**31,600**	348	**1,775,600**	78
72	71	**Ralston Purina** (St. Louis)[8]	**4,980,100**	**2,004,200**	153	**242,700**	74	**997,500**	144
73	72	**Colgate-Palmolive** (New York)	**4,909,957**	**2,568,343**	122	**71,550**	207	**1,231,991**	111
74	83	**Archer Daniels Midland** (Decatur, Ill.)[5]	**4,906,962**	**2,592,704**	120	**117,717**	146	**1,649,866**	82
75	74	**Litton Industries** (Beverly Hills, Calif.)[14]	**4,899,526**	**4,379,903**	70	**313,380**	60	**2,012,963**	71
76	82	**Burroughs** (Detroit)	**4,808,300**	**4,504,200**	65	**244,900**	72	**2,297,400**	57
77	67	**Gulf & Western Industries** (New York)[14]	**4,805,600¶**	**4,148,600**	72	**259,900**	68	**1,836,500**	77
78	73	**American Home Products** (New York)	**4,804,299**	**3,032,583**	102	**682,082**	22	**2,088,584**	64
79	104	**International Harvester** (Chicago)[11]	**4,802,347**	**3,248,925**	92	**(55,441)**	466	**(415,860)**	494
80	80	**International Paper** (New York)	**4,715,600**	**5,795,100**	48	**120,100**	141	**3,298,000**	37
81	85	**Borden** (New York)	**4,568,018**	**2,884,127**	105	**191,407**	96	**1,367,944**	96
82	87	**Armco** (Middletown, Ohio)	**4,543,100**	**3,686,600**	80	**(295,000)‡**	480	**999,400**	143
83	89	**Diamond Shamrock** (Dallas)	**4,483,200**	**5,396,400**	53	**242,200**	75	**2,708,800**	48
84	79	**American Brands** (New York)	**4,474,977***	**4,428,844**	68	**414,120**	46	**2,167,334**	62
85	94	**Martin Marietta** (Bethesda, Md.)	**4,416,526¶**	**2,224,320**	141	**(191,764)**	476	**626,113**	211
86	92	**Deere** (Moline, Ill.)[11]	**4,399,168**	**5,697,296**	49	**104,944**	160	**2,290,828**	58
87	90	**CPC International** (Englewood Cliffs, N.J.)	**4,373,300**	**2,683,400**	113	**193,400**	95	**1,324,300**	102
88	97	**North American Philips** (New York)	**4,326,000**	**2,518,000**	126	**131,000**	131	**987,000**	147
89	103	**PPG Industries** (Pittsburgh)	**4,242,000**	**3,796,700**	76	**302,600**	63	**2,015,100**	70
90	96	**IC Industries** (Chicago)	**4,233,700**	**4,840,200**	58	**122,800**	140	**1,539,300**	91
91	105	**American Motors** (Southfield, Mich.)	**4,215,191**	**1,830,160**	164	**15,469****	414	**278,759**	340
92	93	**Bristol-Myers** (New York)	**4,189,400**	**3,248,580**	93	**472,374**	41	**2,145,901**	63
93	111	**Emerson Electric** (St. Louis)[8]	**4,178,810**	**2,979,560**	103	**349,203**	52	**1,869,239**	75
94	102	**Pillsbury** (Minneapolis)[12]	**4,172,300**	**2,608,300**	118	**169,800**	111	**1,046,200**	136
95	95	**Firestone Tire & Rubber** (Akron, Ohio)[11]	**4,161,000**	**2,571,000**	121	**102,000****	163	**1,236,000**	110
96	98	**Agway** (DeWitt, N.Y.)[5]	**4,101,458**	**1,388,354**	211	**N.A.**[15]		**296,859**	331
97	101	**NCR** (Dayton, Ohio)	**4,074,327**	**3,589,132**	83	**342,640**	54	**2,075,942**	65
98	100	**H.J. Heinz** (Pittsburgh)[16]	**3,953,761**	**2,342,970**	132	**237,530**	77	**1,120,112**	126
99	106	**Borg-Warner** (Chicago)	**3,915,600**	**2,782,800**	109	**206,100**	89	**1,595,400**	86
100	107	**American Cyanamid** (Wayne, N.J.)	**3,856,726**	**3,326,900**	88	**215,918**	86	**1,668,065**	81

¶ Includes sales from discontinued operations of at least 10%; see the explanation of "sales" on page 316.

N.A. Not available.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

‡ Reflects an extraordinary charge of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
50,754	67	6.6	122	12.1	279	5.42	4.89	4.63	1.60	306	(12.11)	339	13.27	321	28
61,189†	52	—		—		(4.47)	(3.74)	2.67	—		(31.75)	427	3.22	424	45
38,461	97	6.0	149	18.7§	95	7.40	6.50	1.42	17.95	59	19.01	85	14.99	284	47
68,200	45	4.9	217	20.0	67	5.02	4.86	1.37	13.87	101	30.93	29	23.59	145	20
5,324	421	1.6	412	17.1§	137	4.50	4.02	2.64	5.48	256	(5.30)	276	23.06	157	29
94,274	24	3.9	295	10.0	331	5.10	5.03	1.96	10.01	178	0.23	224	23.72	140	44
74,200	40	8.4	63	17.6	120	2.75	2.57	0.93	11.41	152	(8.75)	309	5.16	408	42
73,300	42	4.0	285	12.3	272	2.88	3.55	0.96	11.58	148	(3.71)	261	23.48	149	36
93,524	25	4.4	248	15.2	193	7.14	5.53	3.05	8.88	207	(5.37)	279	22.79	163	40
82,000	34	11.0	33	18.8	91	2.59	1.69	0.38	21.00	37	(19.61)	374	16.78	252	44
54,000	61	4.8	228	10.2	329	2.50	0.90	2.55	(0.21)	324	3.23	193	25.85	107	41
41,100†	89	4.5	242	7.7	371	3.13	2.15	2.57	1.99	301	(14.87)	361	14.07	307	33
86,563	31	5.5	178	20.5	58	13.05	(6.09)	3.92	12.78	121	(12.35)	345	7.63	388	36
80,297	36	4.2	274	19.1	88	4.98	4.89	1.59	12.09	136	1.46	211	13.62	314	20
85,600	32	5.9	154	8.3	359	5.73	5.00	1.27	16.29	72	53.82	8	20.67	189	44
37,806	100	4.1	278	7.0§	382	1.52	1.36	2.17	(3.50)	343	(9.85)	318	4.02	420	26
99,900	19	7.0	113	17.0	139	3.27	2.09	0.84	14.56	95	(24.40)	398	13.66	312	36
51,400†	65	—		—		(2.91)**	(3.92)**	7.85	—		(36.49)	443	2.11	431	33
73,447	41	4.1	277	7.7	370	4.17	2.65	3.27	2.46	300	(7.60)	295	7.87	384	44
58,700	54	—		—		(0.36)	1.22	3.24	—		(21.56)	385	12.69	331	26
54,123	60	0.6	436	1.8	442	0.81	4.20	0.06**	28.69	13	(20.67)	382	21.84	175	44
49,300	71	4.9	221	24.3	30	2.68	2.58	0.85	12.12	134	32.14	27	15.41	277	20
42,800†	83	1.5	417	5.8	401	0.86	2.42	1.73	(6.75)	364	21.65	68	5.78	402	43
8,745	319	2.4	376	7.1	380	1.25	1.28	0.56	8.28	216	1.11	214	16.31	262	20
65,500	48	6.4	131	15.6	180	7.32	5.41	(1.06)	—		(5.45)	281	39.82	20	36
65,000	49	5.1	207	10.7	308	5.40	4.60	3.66	3.97	284	17.82	92	0.57	436	44
57,640	57	5.4	184	14.1§	227	3.57	(2.86)	1.72	7.56	226	(2.82)	258	18.85	219	23
47,298	73	14.2	9	32.7	11	4.43	4.00	1.42	12.05	139	7.08	166	9.09	372	42
31,104	123	—		—		(1.34)	(15.70)	4.46	—		(29.35)	418	(4.46)	443	40
32,300	118	2.6	368	3.6	426	1.88	4.61	5.95	(10.88)	377	(4.62)	266	9.15	371	26
32,200†	119	4.2	271	14.0	233	7.13	6.56	2.72	10.12	174	19.29	81	18.53	226	20
44,383	78	—		—		(4.55)‡	(10.27)	4.47	—		(52.34)	460	0.30	437	33
12,738	249	5.4	185	8.9	351	1.78	(0.71)	2.89	(4.73)	350	(1.84)	247	11.46	348	29
75,968	39	9.3	46	18.5§	99	7.20	6.76	2.58	10.81	163	14.70	111	23.62	143	21
43,200	80	—		—		(5.82)	4.23	1.59	—		28.22	36	28.49	71	41
43,011	81	2.4	378	4.6	418	1.55	0.34	2.77	(5.66)	357	(20.13)	378	7.64	386	45
39,000	95	4.4	246	14.6	209	3.98	2.81	2.09**	6.63	236	9.61	146	14.92	285	20
57,404	58	3.0	342	13.3	252	4.53	3.38	1.41	12.34	129	1.67	208	24.99	115	36
37,700†	102	7.1	107	15.0	197	4.33	3.34	1.50	11.16	157	(1.72)	245	20.84	187	32
53,164	63	2.9	349	7.4§	376	2.89	2.36	1.78	4.97	264	25.61	49	25.20	113	20
24,400	157	0.4	443	2.1§	439	0.04**	(2.11)	0.94	(27.07)	389	(44.00)	450	1.24	433	40
36,200	107	11.3	28	22.0	39	3.45	3.00	0.94	13.89	100	27.51	37	18.89	217	42
57,800†	56	8.4	65	18.7	96	5.10	4.42	1.66	11.88	141	8.08	160	14.76	291	36
79,400	38	4.1	279	16.2	161	3.91	3.19	1.26	11.99	140	26.30	41	21.71	176	20
59,900	53	2.5	373	8.3	360	2.21**	2.26	2.71	(2.02)	335	(20.00)	375	8.00	380	30
18,778	194	—		—		N.A.	N.A.	N.A.	—		—		—		29
62,000	50	8.4	62	16.5	150	3.30	2.64	0.92	13.66	105	(14.41)	360	24.76	123	44
44,568	77	6.0	150	21.2§	51	3.40	3.01	0.95**	13.64	106	16.97	96	22.02	169	20
82,900†	33	5.3	194	12.9	261	2.28	2.03	0.66	13.11	114	(10.16)	320	26.50	95	40
38,157	98	5.6	173	12.9	258	4.41	3.41	3.24	3.13	292	3.72	187	14.71	292	28

[11] Figures are for fiscal year ended October 31, 1984.

[12] Figures are for fiscal year ended May 31, 1984.

[13] Figures include St. Regis (1983 rank: 141) acquired November 20, 1984.

[14] Figures are for fiscal year ended July 31, 1984.

[15] Cooperatives provide only "net margin" figures, which are not comparable with the net income figures in these listings.

[16] Figures are for fiscal year ended April 30, 1984.

RANK		**COMPANY**	**SALES**	**ASSETS**		**NET INCOME**		**STOCKHOLDERS' EQUITY**	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
101	99	**Pfizer** (New York)	**3,85[illegible],500**	**4,047,100**	73	**507,900**	34	**2,484,500**	54
102	113	**Boise Cascade** (Boise, Idaho)	**3,816,850**	**3,409,364**	87	**69,610**	215	**1,417,693**	95
103	138	**Eaton** (Cleveland)	**3,759,200**	**2,611,900**	117	**254,400**	70	**1,201,700**	114
104	112	**Dresser Industries** (Dallas)[11]	**3,732,400**	**3,323,800**	89	**96,700**	173	**1,886,600**	74
105	118	**Reynolds Metals** (Richmond, Va.)	**3,728,300**	**3,782,500**	77	**137,300**	123	**1,341,100**	100
106	123	**Northrop** (Los Angeles)	**3,687,800**	**1,956,500**	158	**166,900**	112	**724,800**	194
107	119	**Campbell Soup** (Camden, N.J.)[14]	**3,657,440**	**2,210,115**	142	**191,202**	98	**1,259,908**	106
108	120	**Kimberly-Clark** (Neenah, Wis.)	**3,616,200**	**3,172,600**	98	**225,000**	81	**1,572,200**	88
109	139	**Dana** (Toledo)	**3,575,159**	**2,256,612**	138	**191,278**	97	**1,222,875**	113
110	124	**Merck** (Rahway, N.J.)	**3,559,665**	**4,590,597**	62	**492,967**	38	**2,544,160**	51
111	108	**Kerr-McGee** (Oklahoma City)	**3,537,000**	**3,771,000**	78	**65,000**	224	**1,740,000**	80
112	115	**Owens-Illinois** (Toledo)	**3,509,500**	**3,183,100**	96	**135,800**	125	**1,422,400**	94
113	135	**Teledyne** (Los Angeles)	**3,494,300**	**2,790,700**	108	**574,300**	28	**1,159,300**	119
114	140	**Kaiser Aluminum & Chemical** (Oakland, Calif.)	**3,478,000**	**3,531,900**	84	**(53,900)**	465	**1,170,700**	118
115	125	**B.F. Goodrich** (Akron, Ohio)	**3,415,700**	**2,621,800**	115	**60,600**	238	**1,081,100**	132
116	127	**Inland Steel** (Chicago)	**3,396,192**	**2,607,726**	119	**(41,366)**	462	**1,147,168**	123
117	109	**United Brands** (New York)[9]	**3,360,443**	**1,024,180**	249	**46,213**	276	**298,795**	329
118	146	**Quaker Oats** (Chicago)[5,17]	**3,344,100**	**1,806,800**	168	**138,700**	121	**720,100**	196
119	110	**FMC** (Chicago)	**3,337,800**	**2,399,986**	130	**38,000**	313	**959,760**	152
120	122	**Celanese** (New York)	**3,328,000**	**3,104,000**	100	**161,000**	114	**1,099,000**	130
121	162	**ConAgra** (Omaha)[12]	**3,318,300**	**1,304,872**	218	**62,648****	231	**405,542**	286
122	134	**Textron** (Providence)	**3,221,100**	**2,210,000**	143	**113,500**	150	**1,253,900**	107
123	170	**American Standard** (New York)[18]	**3,214,496**	**2,279,920**	137	**97,080**	170	**926,201**	156
124	117	**American Can** (Greenwich, Conn.)	**3,177,900**	**2,626,700**	114	**136,000**	124	**1,047,100**	135
125	133	**Burlington Industries** (Greensboro, N.C.)[8]	**3,168,760**	**2,294,402**	136	**62,399**	233	**1,193,266**	115
126	128	**Warner-Lambert** (Morris Plains, N.J.)	**3,166,657**	**2,900,190**	104	**223,887**	83	**1,433,217**	93
127	131	**Avon Products** (New York)	**3,143,300**	**2,437,700**	129	**181,700**	104	**1,157,100**	120
128	147	**Whirlpool** (Benton Harbor, Mich.)	**3,137,482**	**1,565,015**	190	**189,565**	99	**1,096,282**	131
129	144	**Crown Zellerbach** (San Francisco)	**3,117,300**	**2,532,800**	125	**86,900**	184	**1,182,700**	117
130	130	**Eli Lilly** (Indianapolis)	**3,109,200**	**3,643,900**	81	**490,200**	39	**2,221,200**	60
131	137	**Abbott Laboratories** (North Chicago, Ill.)	**3,103,962**	**3,172,897**	97	**402,575**	48	**1,602,700**	85
132	91	**Time Inc.** (New York)	**3,067,353**	**2,614,812**	116	**216,398**	84	**1,032,463**	138
133	129	**Combustion Engineering** (Stamford, Conn.)	**3,057,520**	**2,508,344**	128	**99,570**	168	**795,787**	181
134	142	**Owens-Corning Fiberglas** (Toledo)	**3,021,183**	**1,731,830**	173	**113,886**	149	**841,629**	172
135	152	**Swift Independent** (Chicago)[11]	**2,965,643**	**324,580**	449	**11,571**	425	**124,415**	455
136	126	**SmithKline Beckman** (Philadelphia)	**2,949,200**	**3,194,400**	95	**503,600**	35	**2,068,900**	66
137	156	**Scott Paper** (Philadelphia)	**2,847,300**	**3,321,843**	90	**187,021**	102	**1,572,405**	87
138	173	**Fruehauf** (Detroit)	**2,788,200**	**1,700,730**	176	**85,222**	186	**570,152**	224
139	154	**Times Mirror** (Los Angeles)	**2,771,320**	**2,535,429**	124	**232,703**	79	**1,271,671**	105
140	168	**GenCorp** (Akron, Ohio)[19,20]	**2,727,062**	**2,037,104**	149	**7,210**	433	**910,077**	161
141	149	**Mead** (Dayton, Ohio)	**2,720,200**	**2,204,900**	144	**139,300**	120	**970,400**	149
142	150	**Interco** (St. Louis)[7]	**2,678,886**	**1,607,832**	188	**116,194**	147	**1,100,963**	129
143	158	**Kellogg** (Battle Creek, Mich.)	**2,602,400**	**1,667,100**	182	**250,500**	71	**487,200**	255
144	148	**Hercules** (Wilmington, Del.)	**2,570,965**	**2,388,489**	131	**197,185**	92	**1,366,911**	97
145	151	**Penn Central** (New York)	**2,569,100**	**2,766,200**	110	**170,000**	110	**1,619,200**	83
146	167	**Grumman** (Bethpage, N.Y.)	**2,557,807**	**1,445,205**	205	**108,418**	156	**543,722**	235
147	163	**Pennzoil** (Houston)	**2,546,040**	**3,242,837**	94	**130,509**	132	**955,093**	154
148	155	**Singer** (Stamford, Conn.)	**2,518,800**	**1,470,000**	198	**65,100****	222	**483,700**	258
149	143	**Levi Strauss** (San Francisco)[20]	**2,513,536**	**1,421,102**	209	**41,387**	297	**807,441**	179
150	174	**Engelhard** (Edison, N.J.)	**2,510,974**	**863,175**	281	**46,317**	274	**480,227**	259

N.A. Not available.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[17] Figures include Stokely-Van Camp (1983 rank: 444) acquired October 31, 1983.

[18] Figures include Trane (1983 rank: 284) acquired February 24, 1984.

[19] Name changed from General Tire & Rubber March 29, 1984.

[20] Figures are for fiscal year ended November 30, 1984.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
39,000	96	13.2	13	20.4	61	3.08	2.73	0.96	12.31	130	21.87	66	13.32	320	42
27,594	143	1.8	404	4.9	415	2.23	1.91	3.55	(4.54)	348	(2.80)	256	19.25	211	26
42,709	84	6.8	117	21.2	52	7.85	3.06	3.46	8.54	213	(1.86)	248	20.63	190	36
42,400	85	2.6	363	5.1	412	1.24	0.06	1.15	0.76	313	(8.19)	299	7.98	382	45
28,800†	135	3.7	309	10.2	325	6.36	(5.15)	6.23	0.21	318	(12.66)	347	14.38	298	33
41,500	88	4.5	239	23.0	31	3.63	2.21	0.54	20.99	38	25.74	45	34.00	41	41
44,647	76	5.2	195	15.2	194	5.93	5.12	2.56	8.76	209	17.70	93	14.84	288	20
35,284	108	6.2	141	14.3	219	4.94	4.19	2.05	9.19	200	8.26	156	20.41	195	26
36,700	105	5.4	187	15.6	177	3.40	2.04	1.40	9.28	197	(0.63)	232	22.91	160	40
34,800	111	13.9	11	19.4	79	6.71	6.10	2.79	9.17	201	7.33	165	6.37	398	42
9,579	300	1.8	403	3.7	424	1.22	2.24	2.32	(6.22)	360	(5.39)	280	0.14	439	29
46,093	74	3.9	296	9.6	339	4.70	2.48	2.87	5.06	263	12.19	127	14.41	297	32
47,600	72	16.4	4	49.5	5	37.69	14.87	0.54	52.78	3	47.54	13	50.31	9	45
16,234†	216	—		—		(1.27)	(1.75)	2.64	—		(22.91)	390	14.18	303	33
28,770	136	1.8	406	5.5§	406	2.52	0.68	3.50	(3.23)	341	(5.98)	286	13.62	313	30
26,921†	145	—		—		(1.97)	(4.76)	7.96	—		(23.39)	393	2.61	427	33
42,000	86	1.4	419	15.5	184	3.43	(13.82)	(4.25)	—		(30.65)	420	14.15	304	20
28,400	138	4.2	275	18.7§	94	6.71	2.66	1.91	13.39	111	33.08	24	24.09	138	20
27,096	144	1.1	425	4.0	423	1.21	5.02	2.40	(6.62)	363	26.34	40	23.79	139	28
21,500	173	4.8	224	14.7	208	10.87	6.89	6.78	4.83	266	23.70	58	19.55	207	28
19,719	186	1.9	399	15.5	185	2.95**	2.59	(1.23)	—		23.34	59	49.51	10	20
43,000	82	3.5	318	9.1	347	3.11	2.40	2.83	0.95	311	9.35	149	17.19	244	41
49,500	70	3.0	345	10.5	315	2.60	2.27	1.20	8.04	222	1.51	210	28.51	70	37
26,200†	150	4.3	260	10.5§	312	4.90	3.75	5.19	(0.57)	329	13.92	115	13.55	317	34
53,000	64	2.0	397	5.2	409	2.18	3.10	3.65	(5.02)	354	(23.09)	392	12.15	339	22
41,000	90	7.1	111	15.6	178	2.81	2.51	1.98	3.56	287	22.30	64	7.85	385	42
38,000	99	5.8	160	15.7	175	2.16	2.21	1.93	1.13	308	(4.98)	268	4.06	416	43
22,004	170	6.0	147	17.3	131	5.18	4.58	0.69	22.33	32	0.00	227	17.62	237	36
19,075	191	2.8	357	7.4	378	2.61	2.54	5.06	(6.41)	361	(4.78)	267	8.73	376	26
28,700	137	15.8	5	22.1	38	6.73	6.13	2.59	10.02	177	19.18	83	3.36	423	42
33,668	115	13.0	15	25.1	27	3.34	2.86	0.50	20.91	39	(5.19)	274	23.33	152	42
18,000†	200	7.1	112	20.7§	55	3.37	2.65	1.25	10.40	170	(11.59)	334	27.58	78	27
36,387	106	3.3	330	12.5	265	3.00	(0.61)	1.17	9.90	181	6.98	167	19.11	213	45
23,700†	160	3.8	303	13.5	244	3.87	3.05	1.16	12.76	122	(8.77)	310	13.36	318	32
7,273	360	0.4	442	9.3	343	2.32	4.40	N.A.	—		(13.52)	352	—		20
30,465	128	17.1	3	24.3	29	6.23	5.89	0.98	20.35	43	(2.57)	254	19.94	202	42
16,800	213	6.6	121	11.7§	288	3.83	2.58	2.00	6.71	233	13.03	119	15.78	273	26
26,700	147	3.1	340	15.0	201	4.31	0.28	1.27	12.97	116	(25.89)	405	16.65	255	40
30,072	130	8.4	64	18.3	102	3.38	2.90	0.86	14.60	93	10.87	136	26.57	92	27
27,800	141	0.3	446	0.8§	444	0.33	2.81	3.01	(19.84)	387	(7.41)	294	21.03	185	30
17,000	212	5.1	206	14.4	217	4.54	1.49**	3.27	3.35	289	(8.90)	312	21.32	179	26
51,000	66	4.3	253	10.6	311	7.02	5.22	4.23	5.20	259	(5.67)	282	17.54	239	23
17,239	211	9.6	43	51.4	4	3.35	3.17	0.98	13.08	115	28.80	35	15.94	272	20
26,262	149	7.7	95	14.4	214	3.54	3.17	2.21	4.82	267	(1.10)	241	8.52	378	28
34,500	113	6.6	120	10.3	314	3.82	(0.48)	(136.83)	—		25.33	50	10.92	354	36
30,900	125	4.2	268	19.0§	89	3.62	3.82	2.19**	5.15	260	15.67	107	24.90	118	41
8,697	322	5.1	204	11.7§	291	2.23	3.03	2.45	(0.92)	331	37.35	20	19.60	205	29
50,000	68	2.6	365	13.5	248	3.41**	1.52**	(0.89)	—		6.70	171	11.88	341	36
37,000	103	1.7	411	5.1	411	1.07	4.61	0.80	2.95	294	(34.89)	436	27.10	85	23
6,500	379	1.8	402	9.6	335	1.72	2.73	N.A.	—		(25.51)	403	—		28

RANK		COMPANY	SALES	ASSETS		NET INCOME		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
151	165	**Ingersoll-Rand** (Woodcliff Lake, N.J.)	2,478,120	2,203,425	145	58,895	246	996,731	145
152	159	**Revlon** (New York)	2,399,205	2,311,365	135	112,098	151	1,004,991	142
153	164	**AMAX** (Greenwich, Conn.)	2,398,900	3,977,100	75	(238,300)	478	1,610,000	84
154	160	**Allegheny International** (Pittsburgh)	2,371,642	1,694,956	178	14,918	415	271,183	346
155	216	**Cummins Engine** (Columbus, Ind.)	2,325,819	1,505,542	193	187,944	101	648,222	207
156	215	**U.S. Gypsum** (Chicago)[21]	2,318,628	1,614,482	186	186,556	103	860,692	169
157	161	**Kidde** (Saddle Brook, N.J.)	2,312,237	1,677,747	181	79,138	194	652,809	206
158	209	**James River Corp. of Virginia** (Richmond, Va.)[16]	2,301,076	1,459,869	200	97,995	169	466,692	261
159	132	**National Intergroup** (Pittsburgh)	2,294,248	1,580,167	189	52,581**	261	904,209	162
160	169	**Gillette** (Boston)	2,288,600	2,024,400	151	159,300	115	790,800	183
161	121	**Land O'Lakes** (Arden Hills, Minn.)	2,278,423	701,945	306	N.A.		219,882	382
162	181	**Jim Walter** (Tampa, Fla.)[22]	2,258,200	2,732,725	111	96,993	172	821,717	177
163	242	**PACCAR** (Bellevue, Wash.)	2,248,666	1,001,644	255	125,310	138	685,029	200
164	180	**Uniroyal** (Middlebury, Conn.)	2,209,974	1,453,418	202	77,146**	198	727,511	193
165	227	**Wang Laboratories** (Lowell, Mass.)[§]	2,184,700	2,251,900	139	210,200	88	1,249,400	108
166	182	**Upjohn** (Kalamazoo, Mich.)	2,179,060	2,248,363	140	173,272	107	1,134,154	125
167	157	**Murphy Oil** (El Dorado, Ark.)	2,169,262	2,685,069	112	96,167	174	1,006,226	141
168	166	**National Distillers & Chemical** (New York)	2,157,000¶*	1,890,200	162	51,400	264	901,300	164
169	186	**J.P. Stevens** (New York)[11]	2,144,183	1,172,578	230	21,969	386	539,107	237
170	207	**A.E. Staley Manufacturing** (Decatur, Ill.)[§]	2,139,835	1,169,466	232	36,649	322	656,274	205
171	187	**Ogden** (New York)	2,136,675	1,108,804	240	39,549	306	360,906	301
172	178	**White Consolidated Industries** (Cleveland)	2,126,816¶	1,189,203	227	(79,334)	468	485,461	256
173	176	**American Petrofina** (Dallas)	2,125,853	1,705,625	175	45,092	280	659,439	204
174	259	**Mack Trucks** (Allentown, Pa.)	2,105,458	1,174,275	229	74,953**	200	614,100	215
175	177	**Mapco** (Tulsa)	2,097,895	1,792,668	169	125,633	136	760,956	138
176	179	**Avco** (Greenwich, Conn.)[20]	2,080,978	6,915,524	36	125,528	137	1,187,755	116
177	184	**Sherwin-Williams** (Cleveland)	2,075,194	1,004,396	254	65,006	223	404,140	287
178	185	**Olin** (Stamford, Conn.)	2,065,328	1,822,099	165	88,747	182	867,307	167
179	189	**Rohm & Haas** (Philadelphia)	2,042,011	1,633,029	185	172,219	108	965,146	150
180	190	**Cooper Industries** (Houston)	2,029,915	1,953,698	159	106,864	157	1,240,143	109
181	231	**Morton Thiokol** (Chicago)[§]	2,001,508	1,298,848	219	109,759	153	636,311	209
182	201	**Harris** (Melbourne, Fla.)[§]	1,995,802	1,696,863	177	80,410	192	818,091	178
183	204	**Union Camp** (Wayne, N.J.)	1,973,781	2,566,880	123	181,451	105	1,291,381	104
184	230	**Alumax** (San Mateo, Calif.)	1,973,598	1,677,885	180	126,010	135	737,534	190
185	193	**SCM** (New York)[§]	1,963,200	1,159,328	234	41,669	295	529,662	240
186	203	**Gannett** (Washington)	1,960,197	1,812,200	167	223,934	82	1,141,964	124
187	236	**Lear Siegler** (Santa Monica, Calif.)[§,24]	1,941,655	1,469,208	199	85,145	187	569,311	225
188	210	**National Can** (Chicago)	1,911,153	884,122	279	43,156	288	370,667	297
189	153	**Tosco** (Santa Monica, Calif.)	1,899,347	694,926	310	(210,697)	477	163,343	430
190	202	**Hershey Foods** (Hershey, Pa.)	1,892,506	1,122,567	239	108,682	154	660,928	203
191	195	**Squibb** (Princeton, N.J.)	1,886,037	2,134,111	146	197,172	93	1,328,440	101
192	171	**Wilson Foods** (Oklahoma City)[14]	1,883,430	236,618	477	25,567**	374	66,303	478
193	194	**Schering-Plough** (Madison, N.J.)	1,874,300	2,517,600	127	177,200	106	1,316,500	103
194	222	**Great Northern Nekoosa** (Stamford, Conn.)	1,873,300	1,963,700	157	119,900	142	988,600	146
195	219	**Colt Industries** (New York)	1,868,267	1,023,538	250	132,229	129	343,719	308
196	188	**Sterling Drug** (New York)	1,858,295	1,453,871	201	143,360	117	924,196	157
197	206	**Chesebrough-Pond's** (Greenwich, Conn.)	1,857,330	1,447,310	204	119,529	143	625,617	212
198	214	**Hammermill Paper** (Erie, Pa.)	1,854,991	1,095,231	241	55,894	251	456,478	266
199	192	**Baker International** (Orange, Calif.)[§]	1,833,693	2,052,034	148	70,625	214	1,014,620	139
200	200	**Central Soya** (Fort Wayne, Ind.)[22]	1,831,045	516,489	355	21,874	387	307,394	322

¶ Includes sales from discontinued operations of at least 10%; see the explanation of "sales" on page 316.

N.A. Not available.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[21] Figures include Masonite (1983 rank: 499) acquired May 1, 1984.

[22] Figures are for fiscal year ended August 31, 1984.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
33,018	116	2.4	380	5.9	398	2.70	(5.94)	5.62	(7.07)	366	(8.16)	298	2.97	426	45
29,900	131	4.7	233	11.1§	301	2.99	2.81	1.88	4.75	269	10.12	142	7.64	387	43
12,905	246	—		—		(3.86)	(7.74)	3.88	—		(30.74)	421	1.20	434	10
34,800	110	0.6	435	—		(2.51)	(1.43)	5.43	—		(27.51)	412	10.60	357	36
21,028	175	8.1	79	29.0	20	19.76	0.36	3.35	19.42	47	(1.02)	239	21.88	173	45
20,200†	182	8.1	81	21.7	42	11.27	4.77	1.70	20.82	40	4.94	180	23.01	158	32
32,000	120	3.4	323	12.0§	281	3.75	(6.30)	1.92	6.90	230	(5.76)	283	25.28	112	47
21,000	176	4.3	264	20.4§	63	3.40	2.69	0.31	27.22	18	(17.37)	367	34.28	39	26
2,510	481	2.3	384	4.1§	419	1.81**	(8.33)**	9.44	(15.13)	382	(19.29)	373	4.66	413	33
31,400	122	7.0	114	20.1	66	5.18	4.78	2.92	5.90	249	21.47	69	14.28	302	34
5,775	404	—		—		N.A.	N.A.	N.A.	—		—		—		20
18,900	192	4.3	258	11.8	285	4.45	3.24	2.92	4.30	278	14.03	114	10.34	361	29
9,461	302	5.6	175	18.3	103	6.91	2.21	1.29	18.31	55	(20.65)	381	24.95	117	40
20,000	184	3.5	321	10.6	309	2.13**	2.03	1.65	2.59	299	(18.59)	371	11.06	351	30
27,700†	142	9.6	44	16.8	141	1.52	1.16	0.06	37.59	4	(27.00)	410	55.92	5	44
22,870	163	8.0	85	15.3	191	5.67	5.28	2.34	9.25	199	22.68	61	6.71	395	42
6,075	388	4.4	244	9.6	338	2.63	3.60	1.63	4.88	265	(8.47)	303	20.03	201	29
10,640	278	2.4	379	4.8§	417	1.41	1.77	3.61	(8.97)	374	3.47	191	14.57	294	28
32,700	117	1.0	429	4.1	422	1.23	1.09	2.80	(7.90)	370	(6.50)	290	13.23	322	22
4,391	449	1.7	408	5.3§	408	1.26	0.47**	0.95	2.88	296	(10.21)	323	15.06	282	20
45,719	75	1.9	401	11.0	303	2.05	2.77	3.01	(3.78)	346	15.52	108	20.40	196	37
16,118	218	—		—		(5.13)	3.23	3.09	—		(36.13)	441	18.46	227	36
3,524	465	2.1	392	6.8	388	4.00	5.10	8.13	(6.85)	365	16.05	104	14.78	289	29
15,268	223	3.6	317	12.2	276	2.29**	(0.97)	N.A.	—		(33.53)	433	—		37
5,986	392	6.0	151	16.5	149	4.11	1.85	2.21	6.40	237	11.28	131	3.46	422	29
26,502	148	6.0	148	10.6	310	5.17	4.25	(3.23)	—		59.29	6	39.21	21	41
19,437	188	3.1	335	16.1	167	2.84	2.32	1.31	8.05	221	9.56	147	16.05	270	28
17,800	202	4.3	257	10.2	326	3.81	3.01	3.57**	0.54	314	2.00	203	20.45	193	28
11,911	263	8.4	61	17.8	113	6.73	5.33	2.91	8.73	210	8.11	159	14.53	296	28
30,370	129	5.3	193	8.6	356	2.13	1.29	1.22	5.75	252	(13.97)	356	20.77	188	36
18,500	197	5.5	180	17.3	133	6.50	5.15	1.97[23]	12.68	124	9.35	150	26.19	102	28
30,500	127	4.0	280	9.8	333	2.02	1.78	0.73	10.71	165	(30.21)	419	24.80	121	36
17,690	207	9.2	47	14.1	229	3.72	2.72	2.0[illegible][24]	6.17	244	(10.27)	324	15.36	278	26
13,000	242	6.4	132	17.1	136	N.A.	N.A.	N.A.	—		—		—		33
20,900	178	2.1	391	7.9	366	4.24	2.55	3.02	3.45	288	22.57	63	23.09	156	28
28,300	139	11.4	26	19.6	76	2.80	2.40	0.70	14.83	89	23.01	60	19.77	203	27
30,860	126	4.4	250	15.0	200	4.96	3.84	1.17	15.54	79	1.38	212	33.94	42	38
11,364†	268	2.3	387	11.3§	299	4.25	2.13	2.58	5.12	261	16.14	103	17.08	247	34
1,506	488	—		—		(10.19)	(21.35)	0.48	—		(80.00)	465	(6.99)	446	29
15,200	224	5.7	162	16.4	152	3.47	3.20	0.85	15.10	86	26.06	43	28.87	66	20
23,000	162	10.5	36	14.8	205	3.68	3.30	1.98	6.39	238	21.33	70	9.95	364	42
5,400	417	1.4	421	38.6	7	4.34**	(7.31)	N.A.	—		5.71	177	—		20
23,800	159	9.5	45	13.4§	249	3.50	3.62	2.30	4.29	279	1.15	213	0.07	440	42
13,000†	243	6.4	130	12.1	278	4.60	3.25	2.98	4.43	276	(8.25)	301	19.56	206	26
22,400	167	7.1	110	38.5	8	5.99	4.01	3.65	5.08	262	0.51	220	27.12	84	45
22,455	166	7.7	93	15.5	182	2.37	2.24	1.35	5.79	251	10.69	137	6.29	399	42
25,471	152	6.4	128	19.1	87	3.40	3.58	1.47	6.71	211	(4.26)	264	10.62	356	43
12,400†	257	3.0	346	11.5§	294	3.78	2.17	3.45	0.91	312	4.84	181	21.31	180	26
20,131	183	3.9	300	7.0	386	1.00	(0.91)	0.42	9.06	203	(8.86)	311	8.42	379	45
5,367	419	1.2	423	7.1	381	1.51	1.68	2.06	(3.06)	339	13.21	118	10.31	362	20

[23] Figure is for Morton-Norwich.

[24] Figures include Bangor Punta (1983 rank: 438) acquired February 1, 1984.

RANK		COMPANY	SALES	ASSETS		NET INCOME		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
201	●	**Hanson Industries North America** (Iselin, N.J.)[20,26]	**1,817,381**	**1,437,294**	208	**46,993****	372	**353,239**	359
202	221	**Koppers** (Pittsburgh)	**1,816,646**	**1,166,506**	233	**38,764**	358	**566,835**	227
203	226	**R.R. Donnelley & Sons** (Chicago)	**1,814,486**	**1,440,037**	206	**133,893**	127	**798,483**	180
204	199	**Manville** (Denver)	**1,814,184**	**2,330,134**	133	**77,227**	197	**896,027**	165
205	228	**AMP** (Harrisburg, Pa.)	**1,812,834**	**1,487,375**	195	**201,282**	90	**922,215**	158
206	223	**Lever Brothers** (New York)	**1,803,576**	**627,464**	322	**7,076**	434	**365,217**	351
207	191	**Baxter Travenol Laboratories** (Deerfield, Ill.)	**1,800,433**	**2,000,753**	154	**29,047**	357	**1,106,731**	128
208	205	**Emhart** (Farmington, Conn.)	**1,794,500**	**1,059,600**	246	**90,400**	181	**533,000**	239
209	218	**Tribune** (Chicago)	**1,794,436**	**1,737,142**	172	**103,043**	161	**837,676**	176
210	220	**General Signal** (Stamford, Conn.)	**1,786,883**	**1,438,431**	207	**108,510**	155	**901,703**	163
211	232	**Westvaco** (New York)[11]	**1,766,267**	**1,759,364**	170	**129,974**	133	**936,293**	155
212	213	**American Hoechst** (Somerville, N.J.)	**1,760,159**	**1,361,157**	223	**53,180**	259	**682,941**	202
213	266	**Libbey-Owens-Ford** (Toledo)	**1,755,941**	**1,071,142**	243	**70,636**	213	**539,367**	241
214	224	**Cabot** (Boston)[9]	**1,752,523**	**1,751,953**	171	**97,073**	171	**730,398**	195
215	212	**Air Products & Chemicals** (Allentown, Pa.)[9]	**1,735,115**	**2,327,938**	134	**140,618**	119	**1,118,799**	127
216	217	**Corning Glass Works** (Corning, N.Y.)	**1,732,700**	**1,856,800**	163	**100,300****	166	**1,067,100**	133
217	211	**Pitney Bowes** (Stamford, Conn.)	**1,732,095**	**1,613,572**	187	**138,171**	122	**694,465**	198
218	175	**McGraw-Edison** (Rolling Meadows, Ill.)	**1,720,900**	**1,416,800**	210	**10,800**	429	**594,300**	217
219	270	**National Gypsum** (Dallas)	**1,717,308**	**965,581**	265	**106,773**	158	**552,463**	233
220	246	**Zenith Electronics** (Glenview, Ill.)[17]	**1,716,000**	**908,900**	274	**63,600**	228	**442,800**	272
221	206	**Crown Central Petroleum** (Baltimore)	**1,686,784**	**838,682**	348	**804****	450	**188,776**	412
222	235	**Marmon Group** (Chicago)	**1,678,031**	**1,040,435**	247	**71,773**	206	**395,797**	288
223	197	**Ethyl** (Richmond, Va.)	**1,675,059**	**1,481,098**	196	**122,184**	130	**735,063**	191
224	234	**Knight-Ridder Newspapers** (Miami)	**1,664,679**	**1,347,762**	214	**140,810**	118	**921,569**	159
225	261	**National Semiconductor** (Santa Clara, Calif.)[10]	**1,655,126**	**1,136,037**	235	**62,960****	226	**619,029**	214
226	272	**Intel** (Santa Clara, Calif.)	**1,629,332**	**2,029,399**	150	**198,189**	91	**1,360,163**	99
227	236	**Gold Kist** (Atlanta)[9]	**1,624,735**	**462,308**	382	**N.A.**[12]		**124,672**	453
228	240	**Armstrong World Industries** (Lancaster, Pa.)	**1,569,181**	**951,129**	266	**92,230**	179	**647,658**	208
229	252	**Mobay Chemical** (Pittsburgh)	**1,552,400**	**1,169,600**	231	**73,100**	202	**585,700**	220
230	198	**Gould** (Rolling Meadows, Ill.)	**1,547,700**	**1,453,100**	203	**17,800**	402	**854,700**	170
231	237	**International Minerals & Chemical** (Northbrook, Ill.)[9]	**1,546,300**	**1,965,600**	156	**81,700**	190	**1,039,100**	137
232	265	**Black & Decker Manufacturing** (Towson, Md.)[9]	**1,532,883**	**1,473,448**	197	**95,404**	175	**683,507**	201
233	244	**Anderson Clayton** (Houston)[9]	**1,524,541**	**984,395**	261	**38,508**	309	**564,597**	229
234	299	**Apple Computer** (Cupertino, Calif.)[9]	**1,515,876**	**788,786**	291	**64,055**	225	**464,565**	262
235	249	**Stauffer Chemical** (Westport, Conn.)[9]	**1,504,095**	**2,007,480**	152	**35,049****	377	**971,649**	148
236	245	**Witco Chemical** (New York)	**1,495,831**	**755,777**	295	**62,602**	232	**374,786**	295
237	243	**Farmers' Union Central Exchange** (St. Paul)[9]	**1,487,794**	**697,086**	309	**N.A.**[12]		**302,503**	325
238	233	**Joseph E. Seagram & Sons** (New York)[20,27]	**1,479,636***	**4,780,011**	60	**271,337**	66	**2,814,921**	44
239	260	**Brunswick** (Skokie, Ill.)	**1,468,078**	**932,357**	271	**94,244**	177	**460,818**	263
240	241	**Geo. A. Hormel** (Austin, Minn.)[11]	**1,454,527**	**525,322**	351	**29,492**	356	**383,362**	337
241	250	**Monfort of Colorado** (Greeley, Colo.)[22]	**1,438,536**	**212,190**	484	**15,796**	413	**81,724**	474
242	183	**Northwest Industries** (Chicago)	**1,431,900**	**1,525,200**	192	**77,500**	196	**570,200**	223
243	251	**Johnson Controls** (Milwaukee)[9]	**1,425,371**	**992,164**	257	**66,723**	219	**460,148**	264
244	329	**Fleetwood Enterprises** (Riverside, Calif.)[14]	**1,420,418**	**368,378**	429	**63,917**	227	**318,227**	385
245	255	**McGraw-Hill** (New York)	**1,401,778**	**1,176,714**	228	**144,171**	116	**697,931**	197
246	254	**Crown Cork & Seal** (Philadelphia)	**1,369,551**	**806,392**	289	**39,514**	244	**497,774**	252
247	269	**Square D** (Palatine, Ill.)	**1,365,504**	**1,021,130**	251	**106,183**	159	**551,163**	234
248	239	**NL Industries** (New York)	**1,360,119**	**1,663,192**	183	**(141,128)**	473	**765,196**	187
249	257	**Louisiana Land & Exploration** (New Orleans)	**1,340,500**	**1,545,300**	191	**95,300**	176	**590,300**	219
250	347	**Fort Howard Paper** (Green Bay, Wis.)	**1,338,588**	**1,265,134**	222	**133,076**	128	**841,609**	173

● Indicates that a corporation was not among the 500 in 1983.

N.A. Not available.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[26] Wholly owned by Hanson Trust PLC.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
34,873	109	2.6	364	18.6	98	N.A.	N.A.	N.A.	—		—		—		28
15,612†	221	1.6	414	4.1§	420	0.97	0.81**	2.04	(7.16)	367	(13.34)	353	12.36	336	28
17,700	205	7.4	100	16.8	144	3.90	3.00	0.76	16.50	70	29.87	30	21.37	181	27
20,200	181	4.3	265	8.6	355	2.10	1.76	3.88	(3.60)	356	(46.39)	456	(6.37)	445	32
24,800	156	11.1	31	21.8	40	1.87	1.33	0.43	16.30	75	(10.78)	339	17.35	238	36
5,030	430	0.4	441	2.7	432	N.A.	N.A.	N.A.	—		—		—		43
31,044	124	1.4	413	2.6	433	0.31	1.34	0.30	(3.66)	345	(42.18)	449	5.44	407	42
28,944	134	5.0	210	17.0	140	3.37	3.06	1.07	11.85	142	7.46	161	24.48	128	45
18,400†	198	5.7	163	12.5	267	2.55	1.89	N.A.	—		15.00	109	—		27
24,129	158	6.1	146	12.0	280	3.80	3.16	1.35	10.86	161	(4.02)	263	18.06	230	28
14,960	229	7.4	101	12.9	236	4.60	2.30	2.33	6.15	245	(1.23)	240	20.53	191	26
8,908	312	3.0	344	7.8	369	N.A.	N.A.	N.A.	—		—		—		28
22,609	164	4.8	282	13.3	250	3.82	3.10	2.40	9.26	198	19.37	80	19.30	212	32
7,300	355	5.5	177	13.5	246	3.02	2.00	0.84	13.63	107	10.18	141	20.45	53	28
17,700	203	8.1	75	12.6	264	4.55	3.55	1.43	12.36	128	5.48	179	9.88	373	28
26,900	146	5.8	159	9.4	341	2.38**	2.19	1.36	5.72	253	2.35	197	12.19	338	32
27,976	140	8.0	84	19.9	70	3.81	2.33	0.99	13.49	110	12.00	129	24.67	119	44
21,000	177	0.6	437	1.8	441	0.65	2.02	1.06	(4.77)	351	(3.03)	259	19.08	214	36
13,050	241	6.3	142	19.3	81	6.86	3.39	1.69	15.04	87	7.43	163	23.43	151	32
29,000	133	3.7	306	14.4	216	2.88	2.36	0.70	15.19	85	(44.37)	451	10.93	353	36
5,951	394	0.0	450	0.3	446	(0.13)**	0.44	2.10	—		(36.22)	442	14.00	308	29
17,600	208	4.3	261	16.2§	162	N.A.	N.A.	N.A.	—		—		—		33
11,000	270	7.9	87	17.8§	115	1.73	1.30	0.93	6.38	239	28.83	34	23.70	141	28
22,000†	172	8.5	59	15.3	190	2.15	1.80	0.54	14.71	92	12.79	124	25.93	105	27
41,749	87	3.9	298	10.3	322	0.75**	(0.30)	0.30	9.76	184	(24.08)	395	18.85	218	36
25,400	153	12.2	19	14.6	210	1.70	1.05	0.26	20.51	42	(33.33)	432	31.14	40	36
8,500	327	—		—		N.A.	N.A.	N.A.	—		—		—		30
19,992†	185	3.9	156	14.2	222	3.79	2.53	1.45	10.08	175	25.97	44	9.07	374	22
5,902	396	4.7	229	12.5	266	N.A.	N.A.	N.A.	—		—		—		28
19,603	187	1.2	424	2.1	438	0.40	1.42	2.34	(16.19)	384	(37.92)	414	12.69	330	36
9,000	308	5.3	192	7.9	367	2.04	3.02	3.95**	(3.58)	338	(8.41)	302	9.97	363	10
23,000	161	6.2	140	14.0	234	1.95	1.02	1.10	5.89	250	(8.39)	306	4.26	417	45
16,000	219	2.5	369	6.8	389	3.11	1.75	1.96	4.70	270	29.19	33	17.98	231	20
5,282	418	4.2	269	13.8	241	1.05	1.28	N.A.	—		19.49	76	—		44
11,650	266	1.7	410	2.4§	436	0.52**	(0.04)**	1.97	(13.46)	380	(34.24)	396	9.84	365	28
8,500	329	4.3	272	16.7	147	4.28	3.60	1.97	8.05	220	0.43	222	21.91	171	29
2,981†	477	—		—		N.A.	N.A.	N.A.	—		—		—		29
10,309	285	18.3	2	9.6	336	N.A.	N.A.	N.A.	—		—		—		49
19,400	189	6.4	129	20.5	60	4.42	2.94	1.03	15.68	78	19.74	75	27.34	81	45
7,000	365	2.0	394	10.4	318	3.07	2.90	1.81	5.43	258	1.74	204	19.23	209	20
2,628	462	1.1	427	19.3	80	3.48	3.48	(0.40)	—		34.41	54	20.15	200	20
26,000	151	3.4	183	13.2§	255	3.75	(4.23)	9.28**	(8.66)	373	3.63	189	24.40	131	33
21,300	174	4.7	231	14.5	211	4.71	4.17	0.45	26.47	21	(11.98)	336	31.30	47	36
11,300	269	4.5	240	29.3	19	2.71	1.33	0.12	36.38	5	0.30	223	22.85	161	37
14,792	230	10.3	37	20.7	56	2.86	2.53	0.60	16.90	69	4.13	184	28.83	36	37
12,658	252	4.4	251	12.0	282	4.78	3.83	2.30	8.07	218	21.07	72	11.67	345	34
22,600	165	7.8	91	19.3	83	3.71	2.22	1.55	9.12	202	3.04	194	16.38	260	36
12,850	248	—		—		(2.33)	(1.60)	1.61	—		(28.89)	416	11.63	347	28
801	491	7.1	109	16.1	163	3.16	2.65	2.98	0.59	315	17.97	90	9.77	366	10
13,858	234	9.9	41	15.8	172	4.22	3.78	0.76	18.70	53	10.63	140	26.35	93	26

[36] Figures include U.S. Industries (1983 rank: 283) acquired May 7, 1984.

[37] Name changed from Zenith Radio April 26, 1984.

[38] Wholly owned by Seagram.

[39] Figures are for fiscal year ended January 31, 1984.

RANK 1984	RANK 1983	COMPANY	SALES $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
251	262	**West Point-Pepperell** (West Point, Ga.)*	1,333,944	740,865	290	55,732	252	494,868	248
252	263	**Tektronix** (Beaverton, Ore.)*	1,331,309	1,307,438	226	117,970	145	771,335	185
253	258	**Allis-Chalmers** (West Allis, Wis.)	1,330,400*	N.A.		N.A.		N.A.	
254	229	**Asarco** (New York)	1,325,139	1,943,893	160	(304,080)	481	832,388	176
255	247	**Mid-America Dairymen** (Springfield, Mo.)	1,306,789	291,589	456	N.A.*		108,319	460
256	289	**Parker Hannifin** (Cleveland)*	1,304,817	905,345	275	71,499	208	518,221	242
257	295	**NVF** (Yorklyn, Del.)	1,300,000*	N.A.		N.A.		N.A.	
258	264	**Amstar** (New York)*	1,298,931	601,700	328	39,224	307	132,086	444
259	275	**Federal Co.** (Memphis)*	1,295,400	364,573	434	41,367	295	226,800	370
260	292	**Dover** (New York)	1,288,481	918,166	273	100,437	163	339,088	332
261	276	**Richardson-Vicks** (Wilton, Conn.)*	1,280,500	932,800	370	71,905	215	483,800	257
262	290	**Cyclops** (Pittsburgh)	1,271,993	531,108	345	18,434	398	193,768	407
263	306	**Polaroid** (Cambridge, Mass.)	1,271,800	1,346,000	215	25,700	373	914,300	160
264	●	**Temple-Inland** (Diboll, Tex.)	1,262,904	1,363,722	212	102,677	162	792,664	182
265	282	**BOC** (Montvale, N.J.)*	1,251,192	1,467,577	179	36,673	343	1,073,800	140
266	296	**G.D. Searle** (Skokie, Ill.)	1,245,800	1,440,800	184	161,600	113	861,800	168
267	391	**Stone Container** (Chicago)	1,244,395	1,306,441	220	33,647	336	395,148	320
268	327	**Clark Equipment** (Buchanan, Mich.)	1,238,179	938,096	268	34,971**	379	510,940	247
269	279	**Louisiana-Pacific** (Portland, Ore.)	1,230,040	1,514,409	177	42,180	292	746,380	189
270	281	**New York Times** (New York)	1,229,500	868,011	280	100,169	167	488,226	254
271	267	**Hughes Tool** (Houston)	1,215,746	1,817,230	146	(133,839)	472	960,404	151
272	271	**Norton** (Worcester, Mass.)	1,209,605	1,060,126	245	60,435	239	634,021	213
273	288	**CertainTeed** (Valley Forge, Pa.)	1,199,649	760,479	294	45,538	286	430,861	280
274	285	**BASF Wyandotte** (Parsippany, N.J.)*	1,184,500	709,300	303	18,600‡	397	306,100	324
275	291	**Perkin-Elmer** (Norwalk, Conn.)*	1,183,294	1,080,299	240	44,088	281	563,703	231
276	287	**Willamette Industries** (Portland, Ore.)	1,181,910	937,308	269	61,031	236	437,938	276
277	268	**G. Heileman Brewing** (La Crosse, Wis.)	1,171,361	530,908	352	45,798	275	368,447	300
278	280	**VF** (Wyomissing, Pa.)	1,167,356	807,673	288	134,746	139	441,370	274
279	335	**Data General** (Westboro, Mass.)*	1,160,815	1,068,762	244	83,234	189	594,433	218
280	298	**Stanley Works** (New Britain, Conn.)	1,158,372	720,536	301	72,370	204	444,011	270
281	277	**Miles Laboratories** (Elkhart, Ind.)*	1,151,294	976,622	264	27,388	360	500,294	251
282	270	**Timken** (Canton, Ohio)	1,149,900	1,279,124	221	46,057	277	789,871	184
283	308	**Ex-Cell-O** (Troy, Mich.)*	1,141,058	749,793	296	56,873	248	437,464	265
284	293	**Thomas J. Lipton** (Englewood Cliffs, N.J.)	1,138,228	744,469	297	71,003	211	414,763	284
285	278	**Adolph Coors** (Golden, Colo.)	1,132,643*	1,215,143	234	44,731	281	890,942	166
286	273	**Becton Dickinson** (Paramus, N.J.)*	1,126,840	1,139,230	238	63,400	229	606,775	216
287	331	**Harsco** (Wormleysburg, Pa.)	1,101,271	824,094	286	47,230	271	422,347	277
288	303	**AMF** (White Plains, N.Y.)	1,095,271	939,445	267	14,873	416	455,047	267
289	●	**Weirton Steel** (Weirton, W.Va.)	1,075,135	482,927	371	60,623	237	60,633	481
290	311	**National Service Industries** (Atlanta)*	1,073,103	551,964	337	61,306	234	373,996	296
291	318	**EG&G** (Wellesley, Mass.)	1,071,653	367,333	419	53,339	257	149,846	439
292	304	**Hartmarx** (Chicago)*	1,070,830	613,536	326	41,735	294	301,091	326
293	274	**International Multifoods** (Minneapolis)*	1,067,166	429,977	385	23,933	364	218,360	386
294	261	**Magic Chef** (Cleveland, Tenn.)*	1,054,282	539,790	342	54,633	254	346,304	310
295	310	**Ball** (Muncie, Ind.)	1,050,468	632,409	324	46,367	275	395,439	300
296	252	**Wheeling-Pittsburgh Steel** (Pittsburgh)	1,049,000*	N.A.		N.A.		N.A.	
297	301	**Pennwalt** (Philadelphia)	1,047,314	888,333	277	45,336	277	505,165	250
298	316	**Sundstrand** (Rockford, Ill.)	1,041,948	1,089,080	242	66,412	220	535,785	238
299	286	**Masco** (Taylor, Mich.)	1,019,730	1,393,610	220	115,880	148	763,289	186
300	326	**Tyler** (Dallas)	1,012,084	480,509	374	37,339	316	197,891	406

● Indicates that a corporation was not among the 500 in 1983.
N.A. Not available.
* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.
† Average for the year; see the reference to "employees" on page 316.

‡ Reflects an extraordinary charge of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.
§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

EMPLOYEES		NET INCOME AS PERCENT OF SALES		STOCKHOLDERS' EQUITY		EARNINGS PER SHARE			1974-84 GROWTH RATE		TOTAL RETURN TO INVESTORS 1984		1974-84 AVERAGE		INDUSTRY CODE
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
23,100	187	4.5	273	12.3	273	5.40	5.10	2.60	7.58	225	(25.83)	404	21.53	177	22
20,690	179	8.9	69	15.3	189	6.15	2.57	1.23	17.41	62	(21.14)	384	20.91	186	38
N.A.		—		—		N.A.	(11.14)	1.77	—		(64.66)	464	2.36	430	45
10,000†	271	—		—		(12.56)	1.54	4.74	—		(35.67)	439	7.24	391	33
3,796	479	—		—		N.A.	N.A.	N.A.	—		—		—		20
23,147	148	5.5	181	13.8	240	2.68	1.17	1.40	6.71	234	(8.60)	307	23.19	155	34
N.A.		—		—		N.A.	(0.61)	0.46	—		(50.00)	458	8.85	375	33
7,729†	251	3.0	343	29.7	16	N.A.	2.34	3.88	—		—		—		20
11,000†	271	3.5	334	18.2	104	5.03	3.13	2.16	8.82	208	16.31	102	28.65	68	20
16,193	217	7.8	90	18.0	110	2.82	2.18	0.63	16.24	74	16.77	98	29.49	62	45
11,000	271	5.6	172	14.9	203	2.92	2.10	1.96	4.07	283	8.22	157	13.73	311	42
8,900	313	1.5	418	9.5	340	4.82	(0.72)	5.96	(2.10)	336	12.87	123	17.73	234	33
15,403	228	2.0	395	2.8	430	0.83	1.61	0.86	(0.35)	327	(14.18)	358	7.11	392	38
9,600†	299	8.1	74	13.0	257	4.24	1.99	N.A.	—		16.41	101	—		26
11,400	267	2.1	390	2.6§	434	N.A.	N.A.	N.A.	—		—		—		28
10,340	289	13.0	14	18.8	92	3.24	3.04	1.41	8.68	212	50.77	10	19.69	204	42
8,950	310	3.7	309	11.4	297	2.39	(0.31)	1.49	4.82	268	(20.13)	377	29.97	60	26
13,974	245	2.0	396	4.9	416	1.59**	0.86	3.68	(8.05)	371	(31.19)	423	6.40	396	45
13,000†	244	3.4	332	5.7	404	1.23	0.82	1.70	(3.21)	340	(7.98)	297	16.18	265	26
8,100	340	8.2	71	20.5	57	2.53	2.02	0.61	15.35	82	38.80	19	34.25	40	27
13,900	247	—		—		(2.40)	(1.64)	0.66	—		(32.17)	428	3.21	425	45
18,700	195	5.0	213	9.7	334	3.04	2.45	2.34	2.65	298	1.68	207	18.93	215	32
7,833	349	3.7	312	10.4	320	2.17	1.73	(0.70)	—		9.63	145	16.70	254	32
3,901	455	1.6	415	6.1	396	N.A.	N.A.	N.A.	—		—		—		28
15,400	220	5.6	174	11.7	287	1.49	1.15	0.49	11.76	143	(9.36)	315	13.74	309	38
8,215	329	5.2	203	13.9	235	4.00	1.46	2.56	4.56	274	(0.68)	233	16.42	258	26
6,300	381	3.9	290	17.1	138	1.73	2.15	0.19	24.84	23	(40.82)	448	36.80	27	49
31,800	121	10.7	34	28.3	21	3.92	3.64	0.65	19.64	46	(8.20)	300	28.30	74	23
17,695	206	7.2	106	14.0	232	3.21	0.96	0.61	18.06	58	57.72	7	23.49	148	44
14,648†	231	6.3	136	16.3	158	2.60	1.92	0.86	11.74	144	(1.74)	246	24.26	132	34
13,486	236	3.4	377	5.5	405	N.A.	N.A.	N.A.	—		—		—		42
19,313	190	4.0	284	5.8	400	3.91	0.05	5.01	(2.45)	337	(16.12)	362	13.14	325	45
15,100†	226	5.0	215	12.4	268	4.01	3.51	1.53	9.95	179	(0.06)	228	25.46	110	40
3,480†	413	6.3	138	17.1	135	N.A.	N.A.	N.A.	—		—		—		20
9,730	297	4.8	289	5.0	413	1.28	2.55	N.A.	—		(18.40)	369	—		49
17,700	204	5.6	171	10.5	317	3.03	1.71	1.69	6.01	247	10.99	135	5.96	400	38
11,800	264	4.3	256	11.0	302	2.40	1.45	1.30	6.29	241	6.11	173	24.60	125	34
18,604	196	1.4	430	3.3	427	0.45	16.00	1.19	(9.27)	376	(6.25)	288	10.53	358	47
7,844†	348	5.6	170	100.0	1	N.A.	N.A.	N.A.	—		—		—		33
18,000	199	5.7	165	16.5	151	2.50	2.25	0.80	12.07	137	7.44	162	29.94	61	36
23,000	171	5.0	212	35.7	10	1.88	1.56	0.24	22.73	29	(1.46)	244	27.59	77	38
25,000	155	3.9	292	13.8	239	3.36	3.05	0.91	14.00	98	(8.51)	304	26.52	94	23
7,683	357	3.1	338	15.0§	199	4.03	4.22	1.63	9.44	192	(13.06)	350	17.36	243	20
10,968	273	5.3	199	22.2	36	5.63	2.71	0.60	25.09	22	(1.28)	242	31.61	46	36
8,897	316	4.6	247	15.7	176	4.08	3.47	1.02	14.81	90	47.90	12	28.40	72	34
N.A.		—		—		N.A.	(15.74)	19.23	—		(50.90)	459	(1.46)	441	33
9,846	291	4.3	[illegible]	9.0	348	3.31	3.58	2.81	1.65	305	1.73	205	15.10	281	28
15,300	225	6.4	133	12.4	269	3.63	2.42	1.43	9.72	186	(5.03)	271	26.23	100	41
8,090	342	11.6	27	15.1	195	2.00	1.93	0.55	13.78	103	(14.36)	359	16.22	264	34
7,400	358	3.7	305	19.0	90	3.91	1.88	1.16	12.94	118	3.71	188	27.65	76	28

† FORTUNE estimate.
** Wholly owned by BASF AG.
*** Wholly owned by Bayer AG.

RANK 1984	RANK 1983	COMPANY	SALES $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
301	313	**Lone Star Industries** (Greenwich, Conn.)	1,006,565	1,352,545	213	53,436	258	491,731	253
302	317	**Potlatch** (San Francisco)	993,910	1,144,361	237	49,631	267	563,809	230
303	297	**Chromalloy American** (St. Louis)	984,346¶	694,266	311	(4,628)	453	268,782	349
304	323	**Washington Post** (Washington)	984,303	645,800	319	85,886	185	380,127	292
305	309	**Vulcan Materials** (Birmingham, Ala.)	982,877	811,430	287	78,421	195	511,455	246
306	300	**Phelps Dodge** (New York)	976,967	1,728,349	174	(276,846)	479	828,700	175
307	314	**Clorox** (Oakland, Calif.)[8]	974,566	701,396	307	79,709	193	431,313	278
308	326	**Dow Jones** (New York)	965,620	803,539	290	129,140	134	505,601	249
309	336	**Brockway** (Brockway, Pa.)	963,517	502,968	362	6,090	436	218,0[illegible]	386
310	337	**CBI Industries** (Oak Brook, Ill.)	960,251	1,344,122	216	38,657	308	567,909	226
311	325	**Cluett Peabody** (New York)	949,263	325,706	350	26,780	367	245,817	362
312	320	**Springs Industries** (Fort Mill, S.C.)	944,990	614,989	325	36,071	326	441,368	275
313	356	**Capital Cities Communications** (New York)	939,722	1,208,172	225	135,193	126	734,485	192
314	332	**Interlake** (Oak Brook, Ill.)	938,430¶	682,574	312	36,551	323	323,264	317
315	305	**Mitchell Energy & Development** (The Woodlands, Tex.)[10]	930,708	1,981,396	155	72,778	203	518,770	242
316	378	**Collins & Aikman** (New York)[7]	930,535	475,763	376	48,054	269	240,736	365
317	358	**Varian Associates** (Palo Alto, Calif.)[9]	928,715	720,750	300	59,877	241	426,946	280
318	324	**Lafarge** (Dallas)	927,396	979,329	263	(4,586)	452	380,212	291
319	319	**Quaker State Oil Refining** (Oil City, Pa.)	924,630	573,095	332	17,756	403	275,615	344
320	333	**Dean Foods** (Franklin Park, Ill.)	923,092	279,506	463	26,460	369	129,148	447
321	344	**Outboard Marine** (Waukegan, Ill.)[9]	921,572	671,624	315	52,736	260	366,660	299
322	342	**Rexnord** (Milwaukee)[11]	921,053	861,538	282	28,226	360	391,484	289
323	330	**A.O. Smith** (Milwaukee)	920,857	413,334	407	(43,161)	463	160,551	432
324	312	**General Cinema** (Chestnut Hill, Mass.)[11]	916,330	991,448	258	110,959	152	355,922	303
325	341	**Avery International** (Pasadena, Calif.)[10]	913,021	530,849	346	47,561	270	270,525	347
326	363	**Federal-Mogul** (Southfield, Mich.)	911,718	628,685	321	48,385	268	327,992	314
327	302	**General Instrument** (New York)[7]	910,993	828,945	285	36,030	327	629,268	210
328	328	**CF Industries** (Long Grove, Ill.)	908,003	1,014,396	252	N.A.[13]		511,921	245
329	357	**Inspiration Resources** (New York)	903,586	1,492,128	194	(101,291)	470	584,894	221
330	334	**Tecumseh Products** (Tecumseh, Mich.)	901,923	555,621	336	70,664	212	441,668	273
331	371	**Dayco** (Dayton, Ohio)[11]	901,120	473,183	377	16,065	412	168,078	428
332	321	**Fairchild Industries** (Germantown, Md.)	898,852	928,887	272	1,382	447	222,999	380
333	340	**Household Manufacturing** (Prospect Heights, Ill.)[20]	897,890	702,766	304	32,877	345	408,928	285
334	248	**Mattel** (Hawthorne, Calif.)[29]	880,850	512,693	357	71,265	209	126,163	450
335	364	**Sun Chemical** (New York)	872,948	592,269	329	25,218	376	178,501	419
336	406	**Brown-Forman Distillers** (Louisville)[16]	863,793*	982,827	262	73,554	201	518,300	244
337	360	**Midland-Ross** (Cleveland)	857,882¶	698,666	308	(35,299)	460	263,616	352
338	355	**Dow Corning** (Midland, Mich.)	855,100	884,800	278	91,300	180	509,400	248
339	367	**Fuqua Industries** (Atlanta)	854,594	511,811	359	37,494	317	169,532	427
340	322	**Storage Technology** (Louisville, Colo.)	850,000	N.A.		N.A.		N.A.	
341	351	**Hoover Universal** (Ann Arbor, Mich.)	845,503	515,122	356	36,701	320	211,134	389
342	359	**National Starch & Chemical** (Bridgewater, N.J.)	842,570	541,610	341	54,956	253	328,068	313
343	346	**Freeport-McMoRan** (New York)	842,163	1,906,485	161	94,150	178	691,183	199
344	343	**Lubrizol** (Wickliffe, Ohio)	831,681	701,974	305	67,731	217	474,343	260
345	366	**Scovill** (Waterbury, Conn.)	824,993	509,845	360	36,682	321	253,006	359
346	338	**E-Systems** (Dallas)	819,353	415,238	406	61,109	235	285,954	336
347	369	**American Greetings** (Cleveland)[7]	817,329	658,894	317	59,658	242	365,496	300
348	354	**Champion Spark Plug** (Toledo)	816,455	579,300	331	27,344	364	359,400	302
349	405	**Sheller-Globe** (Toledo)[9]	816,415	438,580	393	34,826	330	203,234	401
350	372	**Gerber Products** (Fremont, Mich.)[8]	805,443	500,295	366	50,133	266	331,488	319

¶ Includes sales from discontinued operations of at least 10%; see the explanation of "sales" on page 316.

N.A. Not available.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[20] Wholly owned by Household International.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
7,122	362	5.3	190	7.9§	366	2.63	0.07**	2.22	1.71	304	(0.80)	235	17.09	246	32
8,354	333	5.0	214	7.6§	372	2.80	2.03	3.10	(1.01)	332	(20.07)	376	13.06	327	26
13,750	235	—		—		(0.57)	(3.05)	2.31	—		(11.83)	335	7.10	393	34
5,300	422	8.7	51	22.6	33	6.11	4.82	0.76	23.18	25	10.65	139	35.90	28	27
6,034†	389	8.0	83	15.3	187	6.75	4.69	2.65	9.80	182	5.80	174	24.80	120	10
7,648	354	—		—		(11.27)	(2.76)	5.92	—		(45.05)	453	(3.83)	442	33
5,700	406	8.2	69	18.5	100	3.09	2.72	0.88	13.38	112	12.87	122	22.14	168	43
6,834	369	13.4	12	25.5	25	2.01	1.79	0.36	18.77	51	(12.66)	346	30.76	50	27
12,500	255	0.6	434	2.8	429	0.77	0.03	1.67	(7.43)	368	10.04	144	13.60	316	32
14,000	233	4.0	281	6.8	391	2.09	2.53	1.45	3.69	286	(10.38)	325	0.94	435	34
18,818	193	2.8	356	10.9	304	2.98	3.02	(0.24)	—		(3.88)	262	38.86	67	23
16,800†	214	3.8	301	8.2	361	4.06	4.15	1.56	10.04	176	(11.27)	331	20.42	194	22
8,600	325	14.4	7	18.4	101	10.40	8.53	1.43	21.95	33	14.46	112	31.11	49	27
9,026	307	3.9	294	11.3	300	6.68	3.94	6.97	(0.42)	328	8.59	153	16.79	250	33
3,400	469	7.8	89	14.0	230	1.52	1.68	0.22	21.23	36	(22.49)	429	30.39	55	10
10,400†	282	5.2	202	20.0	69	4.47	2.30	1.21	13.96	99	6.89	168	30.71	51	22
15,900	220	6.5	126	14.0	231	2.72	2.14	0.54	17.55	61	(31.57)	434	29.23	64	36
6,000	391	—		—		(0.20)	(0.41)	N.A.	—		(25.43)	402	—		32
4,797	440	1.9	398	6.4	395	0.82	1.66	1.34	(4.82)	352	8.14	158	7.93	383	29
4,630	444	2.9	352	20.5	59	1.93	1.61	0.17	27.66	16	25.68	47	46.18	12	20
9,540†	301	5.7	167	14.4	215	3.02	2.35	1.01	11.58	149	17.03	95	23.46	150	45
13,612	236	3.1	339	7.2	379	1.37	0.19	1.39	(0.14)	322	(20.55)	380	13.73	310	45
9,810†	296	—		—		(5.83)	1.85	0.07	—		(26.74)	408	17.44	241	40
12,000†	260	12.1	21	31.2	12	2.94	2.62	0.25	27.89	15	20.40	73	43.06	16	49
8,774	318	5.2	198	17.6	119	2.42	1.84	0.88	10.65	166	19.41	78	13.61	315	28
14,223	232	5.3	191	14.8	206	3.61	3.10	0.91	14.71	91	(12.27)	343	22.74	165	45
25,100	154	4.0	287	5.7	402	1.16	3.34	0.57	7.33	228	(48.46)	457	27.41	80	36
1,893	486	—		—		N.A.	N.A.	N.A.	—		—		—		28
5,900	398	—		—		(3.11)	(3.83)	3.34	—		(58.89)	463	(5.46)	444	10
10,280†	286	7.8	88	16.0	169	12.92	10.09	5.25	9.42	194	0.77	216	22.64	166	45
10,000	292	1.8	405	9.6	337	2.35	0.71	1.57	4.12	282	(8.95)	313	10.99	352	30
12,726	250	0.2	448	—		(0.82)	1.51	0.53	—		(5.14)	273	30.06	59	41
12,000	261	2.7	311	8.0	363	N.A.	N.A.	N.A.	—		—		—		34
17,500†	210	8.1	78	56.5	3	2.06	1.78	(0.32)	—		105.00	2	—		47
8,300	337	2.9	350	14.1	226	3.23	1.24	0.49	20.67	41	(2.55)	253	26.79	90	28
6,700	372	8.5	56	14.2	224	2.90	3.76	0.72	15.01	88	(1.91)	249	27.00	86	49
10,334	284	—		—		(3.03)	(0.89)	1.75	—		0.67	218	19.53	208	36
6,118†	384	10.7	35	17.9	112	N.A.	N.A.	N.A.	—		—		—		28
9,934	294	4.4	249	22.1	37	3.76	4.36	0.53	21.53	34	19.10	84	38.18	23	45
N.A.		—		—		N.A.	(1.19)	0.30	—		(83.49)	466	5.66	404	44
8,308	334	4.3	252	17.4	128	2.72	2.38	0.81	12.81	119	(5.87)	284	26.23	99	34
5,478	414	6.5	123	16.8	145	N.A.	N.A.	N.A.	—		—		—		28
4,800	438	11.2	30	13.6	243	1.32	1.32	1.38	0.29	317	(13.79)	334	15.17	280	10
4,176	453	8.1	72	14.3	221	1.73	1.65	1.24	3.34	290	2.83	195	4.73	412	28
17,943	201	4.5	243	14.5	212	3.01	2.53	1.77	5.45	257	43.43	17	24.79	122	36
11,984	262	7.5	97	21.4	46	2.02	1.82	0.23	24.50	24	(22.22)	387	43.13	15	36
17,500	209	7.3	104	16.3	155	1.91	1.54	0.60	12.38	131	18.87	86	26.49	96	27
12,600	254	3.4	328	7.6	373	0.71	0.70	1.26	(5.57)	355	(18.59)	370	5.78	401	36
12,055	259	4.3	263	17.1	134	3.73	1.93	1.68	8.31	215	(3.31)	251	26.98	87	40
12,624†	253	6.2	139	15.6	179	3.72	2.92	0.90	15.25	84	(8.71)	308	23.57	167	20

RANK		COMPANY	SALES	ASSETS		NET INCOME		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
351	362	**Reichhold Chemicals** (White Plains, N.Y.)	**801,355**	**373,838**	427	**35,709**	372	**208,430**	394
352	294	**Crane** (New York)	**792,212**	**460,421**	384	**30,965**	349	**210,883**	390
353	365	**McCormick** (Hunt Valley, Md.)[11]	**788,359**	**542,482**	340	**54,396**	255	**243,706**	364
354	381	**Insilco** (Meriden, Conn.)	**786,894**	**674,039**	314	**33,041**	342	**270,289**	348
355	428	**Arvin Industries** (Columbus, Ind.)	**781,986**	**384,485**	438	**30,236**	352	**208,650**	393
356	398	**Idle Wild Foods** (Worcester, Mass.)[10]	**780,144**	**147,383**	488	**4,538**	438	**65,024**	479
357	350	**Amdahl** (Sunnyvale, Calif.)	**779,413**	**895,420**	276	**36,439**	325	**428,300**	279
358	373	**Bemis** (Minneapolis)	**779,317**	**395,001**	415	**18,092**	400	**175,043**	421
359	380	**Southwest Forest Industries** (Phoenix)	**777,394**	**714,490**	302	**4,092**‡	442	**188,797**	411
360	385	**Big Three Industries** (Houston)	**775,678**	**1,152,791**	236	**56,696**	250	**566,272**	228
361	410	**Coleco Industries** (West Hartford, Conn.)	**774,860**	**389,004**	418	**(79,818)**	469	**10,502**	492
362	370	**Newmont Mining** (New York)	**770,081**	**2,132,677**	147	**41,034**	300	**1,480,901**	92
363	395	**M/A-Com** (Burlington, Mass.)[9]	**768,449**	**742,190**	298	**38,390**	312	**426,289**	281
364	407	**Tyson Foods** (Springdale, Ark.)[9]	**750,112**	**298,172**	455	**18,164**	399	**84,299**	473
365	375	**Smith International** (Newport Beach, Calif.)	**746,642**	**990,572**	259	**(68,451)**	467	**450,053**	269
366	415	**Sanders Associates** (Nashua, N.H.)[7]	**746,138**	**526,393**	349	**42,296**	287	**317,374**	320
367	386	**Figgie International Holdings** (Willoughby, Ohio)	**742,170**	**493,818**	369	**17,413**	405	**191,596**	408
368	383	**Sonoco Products** (Hartsville, S.C.)	**740,869**	**408,205**	411	**42,535**	291	**260,640**	356
369	402	**MEI** (Minneapolis)	**734,363**	**462,497**	383	**43,792**	285	**205,565**	397
370	374	**GAF** (Wayne, N.J.)	**731,314**	**452,273**	390	**56,703****	249	**214,006**	387
371	348	**National Cooperative Refinery Assoc.** (McPherson, Kans.)[8]	**730,196**	**438,051**	395	**N.A.**[10]		**157,037**	436
372	393	**Mohasco** (Amsterdam, N.Y.)	**716,250**	**380,048**	425	**17,557**	404	**219,709**	383
373	•	**Hasbro Bradley** (Pawtucket, R.I.)[12]	**714,392**	**665,532**	316	**53,388**	262	**290,831**	335
374	379	**Bell & Howell** (Chicago)	**713,548**	**497,594**	367	**33,047**	341	**205,578**	396
375	349	**Anchor Hocking** (Lancaster, Ohio)	**712,973**	**529,346**	347	**(18,434)**	459	**261,684**	354
376	392	**Harcourt Brace Jovanovich** (New York)	**712,544**	**537,397**	344	**34,479**	333	**211,947**	388
377	382	**Badische** (Williamsburg, Va.)[10]	**708,634**	**517,991**	354	**21,518**‡	389	**205,497**	398
378	397	**Scott & Fetzer** (Lakewood, Ohio)[2]	**705,416**	**468,082**	381	**40,644**	301	**243,901**	363
379	384	**Economics Laboratory** (St. Paul)[6]	**704,016**	**430,326**	403	**36,445**	324	**209,577**	391
380	445	**Cessna Aircraft** (Wichita)[9]	**693,586**	**674,244**	313	**949**	449	**334,663**	311
381	429	**Echlin** (Branford, Conn.)[8]	**688,971**	**472,400**	378	**43,830**	284	**260,855**	355
382	420	**Consolidated Papers** (Wisconsin Rapids, Wis.)	**686,338**	**548,429**	338	**80,588**	191	**417,221**	283
383	388	**Interstate Bakeries** (Kansas City, Mo.)[5]	**685,604**	**218,476**	485	**18,632****	396	**62,417**	480
384	399	**Dennison Manufacturing** (Framingham, Mass.)	**684,034**	**397,204**	413	**34,751**	331	**227,635**	376
385	387	**Hoover** (North Canton, Ohio)	**683,271**	**335,392**	446	**40,170****	302	**190,433**	410
386	400	**Deluxe Check Printers** (St. Paul)	**682,823**	**438,430**	394	**87,816**	183	**299,106**	328
387	•	**Jefferson Smurfit** (Alton, Ill.)	**678,112**	**342,357**	441	**24,504**	381	**114,204**	460
388	390	**Joy Manufacturing** (Pittsburgh)[9]	**675,996**	**836,784**	284	**32,945****	343	**443,763**	271
389	403	**Briggs & Stratton** (Wauwatosa, Wis.)[6]	**671,193**	**417,780**	405	**34,736**	332	**272,873**	345
390	411	**Armstrong Rubber** (New Haven, Conn.)[9]	**665,630**	**376,960**	426	**25,391**	375	**208,721**	392
391	377	**Frederick & Herrud** (Southfield, Mich.)[10]	**664,764**	**127,139**	490	**2,317**	445	**33,977**	488
392	389	**Nalco Chemical** (Oak Brook, Ill.)	**664,303**	**479,271**	375	**76,232**	199	**352,120**	305
393	443	**Eagle-Picher Industries** (Cincinnati)[11]	**663,929**	**408,303**	410	**28,142**	362	**239,158**	366
394	401	**Ferro** (Cleveland)	**662,867**	**362,298**	437	**16,886**	409	**188,343**	413
395	433	**Cincinnati Milacron** (Cincinnati)	**660,517**	**653,924**	318	**18,731**	395	**312,920**	321
396	439	**Nucor** (Charlotte, N.C.)	**660,260**	**482,188**	372	**44,548**	282	**299,603**	327
397	454	**ROLM** (Santa Clara, Calif.)[6]	**659,704**	**736,340**	299	**37,731**	315	**541,336**	236
398	419	**Tyco Laboratories** (Exeter, N.H.)[12]	**650,064**	**386,939**	420	**30,095**	353	**184,583**	415
399	376	**Pabst Brewing** (Milwaukee)	**650,038***	**215,865**	483	**1,630**	446	**39,959**	486
400	451	**Prime Computer** (Natick, Mass.)	**642,779**	**502,039**	363	**53,312**	263	**325,002**	316

• Indicates that a corporation was not among the 500 in 1983.

N.A. Not available.

* Does not include excise taxes; see the explanation of "sales" on page 316.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

‡ Reflects an extraordinary charge of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
4,239	452	3.2	332	12.3	270	3.63	2.74	3.59	0.11	319	(0.30)	230	16.78	251	28
7,800	350	3.9	291	14.7§	207	3.20	(10.49)	4.53	(3.42)	342	23.71	57	16.13	266	34
7,650	353	6.9	115	22.4	35	4.40	3.22	0.91	17.00	68	9.52	148	13.17	324	20
8,256	338	4.2	270	12.2	275	1.82	1.90	0.95	6.77	232	5.78	175	24.48	129	28
12,707	251	3.9	297	14.5	213	2.59	1.58	0.48	18.39	54	26.09	42	24.61	124	40
2,360	483	0.6	438	7.0	384	2.46	2.42	2.51	(0.21)	325	2.20	198	—		20
7,000	364	4.7	232	8.5	358	0.80	1.03	N.A.	—		(26.12)	406	—		44
8,113	342	2.3	382	10.3	321	2.56	1.67	1.96	2.72	297	32.95	25	21.20	182	26
6,100	387	0.5	439	—		(0.23)‡	(3.34)**	1.67	—		2.42	196	16.57	257	26
5,420	416	7.3	103	10.0	332	1.40	1.07	0.55	9.72	187	0.81	215	13.17	323	28
5,925†	395	—		—		(4.95)	(0.48)	0.03	—		(37.82)	446	32.09	45	47
7,100	363	5.3	188	2.8	431	1.35	1.75	4.55	(11.44)	378	(27.34)	411	11.38	349	33
10,541	280	5.0	216	9.0	350	0.90	0.72	0.21	15.48	80	(2.06)	250	34.58	38	36
10,500	281	2.4	375	21.6	44	2.33	1.42	(0.29)	—		118.67	1	52.80	6	20
8,432†	331	—		—		(3.01)	1.85	(2.08)	—		(45.75)	455	4.06	419	45
10,793	276	5.8	158	13.6	242	2.25	2.04	(2.08)	—		(27.67)	413	42.37	17	36
13,300	239	2.4	381	9.1	346	3.00	3.62	1.45	7.54	227	(11.58)	332	25.65	109	45
10,248†	287	5.7	164	16.3	156	3.90	3.08	1.19	12.64	126	(7.95)	296	27.48	79	26
5,100	428	6.0	152	21.3	48	2.60	2.27	0.23**	27.45	17	6.84	169	52.74	7	49
3,816	456	7.8	92	26.5	23	3.70**	(0.47)**	2.13	5.68	254	47.97	11	17.73	235	28
550	494	—		—		N.A.	N.A.	N.A.	—		—		—		29
12,263	258	2.5	374	8.0§	365	2.60	1.96	0.93	10.83	162	5.68	178	14.35	299	25
7,000	366	7.3	102	17.9§	111	2.58	0.96	0.02	66.08	2	101.87	3	63.84	3	47
10,349	283	4.6	236	16.1	168	3.04	3.59**	2.72	1.12	309	12.56	126	22.92	159	38
10,700	277	—		—		(1.80)	(0.45)**	1.59	—		(38.27)	447	14.70	293	32
8,300	336	4.8	223	16.3	159	3.70	3.03	1.55	9.06	204	69.91	4	25.00	114	27
4,283	451	3.0	341	10.5	316	N.A.	N.A.	N.A.	—		—		—		28
16,600	215	5.8	161	16.7	148	6.01	4.80	1.81	12.75	123	39.88	18	26.70	91	36
6,713	371	5.2	200	17.4	127	2.69	(1.16)	1.10	9.35	195	(10.63)	326	4.83	410	43
8,645†	324	0.1	449	0.3	445	0.05	(0.98)	1.34	(28.01)	390	(20.50)	379	16.97	248	41
8,700	321	6.4	134	16.8	142	2.12	1.50	0.73	11.25	155	8.86	152	11.75	342	40
4,901†	434	11.7	23	19.3	82	3.70	2.25	1.02	13.79	102	43.48	16	32.88	43	26
11,800	265	2.7	358	29.9	14	3.86**	(2.14)**	(0.83)	—		17.86	91	18.59	225	20
8,132	341	5.1	208	15.3	192	2.27	2.07	0.91	9.60	190	1.68	206	28.39	73	26
15,005	227	5.9	155	21.1	53	3.25**	2.27	0.66	17.28	65	11.16	133	20.18	198	36
10,945	275	12.9	16	29.4	18	4.01	1.68	0.33	28.27	14	46.86	14	20.31	197	27
6,600	375	3.6	314	21.5	45	2.55	1.29	N.A.	—		(22.30)	388	—		26
9,249	304	4.9	220	7.4	375	1.80**	0.15	1.17	4.37	277	(11.90)	337	10.35	360	45
8,777	317	5.2	201	12.7	262	2.40	2.20	1.79	2.98	293	(2.65)	255	9.71	368	45
5,495	412	3.8	302	12.2	277	2.61	2.41	0.51	17.68	60	12.68	125	24.44	130	30
3,000	474	0.4	444	6.8	390	0.65	1.05	0.38	5.60	255	—		—		20
4,751	441	11.5	25	21.7	43	1.94	1.78	0.68	11.05	159	(10.65)	327	16.10	268	28
8,700	320	4.2	267	11.8	286	2.91	1.58	1.86	4.58	273	(5.24)	275	18.63	224	45
8,020†	344	2.6	367	9.0	349	2.53	3.04	2.69	(0.60)	330	(23.08)	391	14.35	300	28
9,707†	298	2.8	353	6.0	397	0.80	(0.46)	0.53	4.14	280	(33.68)	435	26.20	101	45
3,800	458	6.8	118	14.9	202	3.16	1.98	0.82	14.47	96	(23.74)	394	34.72	37	33
8,940	311	5.7	168	7.0	385	1.49	1.80	N.A.	—		—		—		36
7,443	356	4.6	237	16.3	157	3.22	2.47	0.65	17.35	63	23.93	56	25.45	111	26
2,500	482	0.3	447	4.1	421	0.26	0.31‡	0.50	(6.42)	362	19.40	79	12.75	329	49
7,348	359	8.1	73	16.1	166	1.25	0.68	(0.02)	—		2.13	201	66.32	2	44

[34] Name changed from Hasbro Industries September 10, 1984.
[35] Wholly owned by BASF AG.

RANK		COMPANY	SALES	ASSETS		NET INCOME		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
401	409	**Maytag** (Newton, Iowa)	642,561	329,658	447	63,141	230	228,865	375
402	412	**M. Lowenstein** (New York)	639,580	381,952	424	30,636	351	204,285	399
403	423	**Federal Paper Board** (Montvale, N.J.)	637,450	606,870	327	37,075	319	204,130	400
404	429	**A.H. Robins** (Richmond, Va.)	631,891	N.A.		(461,600)	484	N.A.	
405	413	**Raychem** (Menlo Park, Calif.)[8]	629,862	543,228	339	37,166	318	322,528	318
406	417	**Gulfstream Aerospace** (Savannah, Ga.)	629,667	497,011	368	26,977	366	199,506	405
407	424	**Bausch & Lomb** (Rochester, N.Y.)	629,170¶	566,695	333	50,235	265	327,187	315
408	458	**Amsted Industries** (Chicago)[9]	626,473	509,840	361	24,200	382	370,517	298
409	431	**Dexter** (Windsor Locks, Conn.)	625,209	426,429	402	29,734	355	200,180	404
410	345	**Todd Shipyards** (New York)[9]	622,314	383,818	422	21,869	388	130,754	445
411	418	**Handy & Harman** (New York)	619,507	441,444	392	14,156	419	134,431	443
412	425	**Rohr Industries** (Chula Vista, Calif.)[14]	613,933	395,567	414	37,763	314	190,531	409
413	•	**Esselte Business Systems** (Garden City, N.Y.)	610,161	501,150	365	30,029	354	238,872	368
414	446	**Flowers Industries** (Thomasville, Ga.)[5]	602,995	262,915	467	22,140	385	126,6[illegible]8	449
415	452	**Revere Copper & Brass** (New York)	601,120	384,646	421	(4,488)	451	42,363	485
416	440	**Datapoint** (San Antonio)[14]	600,154	622,767	323	28,182	361	353,861	304
417	427	**AM International** (Chicago)[14]	598,451	457,407	388	66,987**	218	(16,033)	493
418	437	**Westmoreland Coal** (Philadelphia)	593,118	398,306	412	(49,430)	464	171,377	425
419	436	**H.H. Robertson** (Pittsburgh)	592,840	389,398	417	11,073	427	160,771	431
420	455	**Illinois Tool Works** (Chicago)	592,253	483,953	370	60,004	240	377,557	293
421	426	**Nashua** (Nashua, N.H.)	591,932	248,566	474	19,902	393	123,421	456
422	461	**Savannah Foods & Industries** (Savannah, Ga.)	591,337	252,109	472	17,281	406	95,893	470
423	414	**Wm. Wrigley Jr.** (Chicago)	590,531	307,809	453	39,662	305	229,132	373
424	•	**Advanced Micro Devices** (Sunnyvale, Calif.)[9]	583,346	512,276	358	71,111	210	278,574	341
425	469	**Ceco** (Oak Brook, Ill.)	582,585	264,300	466	10,252	430	145,800	440
426	421	**Kellwood** (St. Louis)[16]	582,501	315,444	450	14,563	418	102,505	466
427	475	**Worthington Industries** (Columbus, Ohio)[13]	577,779	365,640	433	28,453	359	176,754	420
428	450	**Oxford Industries** (Atlanta)[12]	577,313	230,482	481	25,007	378	120,518	457
429	435	**Fieldcrest Mills** (Eden, N.C.)	572,821	363,427	435	4,143	441	172,096	424
430	462	**Roper** (Kankakee, Ill.)[14]	571,644	280,235	461	17,846	401	103,267	465
431	457	**Easco** (Baltimore)	571,226	288,937	457	(9,002)	456	106,161	464
432	487	**Rubbermaid** (Wooster, Ohio)	566,429	368,288	430	46,870	273	239,039	367
433	464	**United Merchants & Manufacturers** (New York)[5]	563,193	430,661	399	12,350**	422	167,462	429
434	456	**Warnaco** (Bridgeport, Conn.)	561,391	338,473	444	20,474	392	174,794	422
435	404	**Sybron** (Rochester, N.Y.)	561,382¶	428,821	401	(10,828)	457	182,038	418
436	•	**Computervision** (Bedford, Mass.)	556,342	538,457	343	41,441	296	263,366	353
437	472	**Cooper Tire & Rubber** (Findlay, Ohio)	555,388	279,857	462	24,578	380	160,526	433
438	430	**Michigan Milk Producers Assoc.** (Southfield, Mich.)[8]	553,325	92,932	493	N.A.[15]		27,741	489
439	453	**Media General** (Richmond, Va.)	547,661	563,278	334	39,760	304	278,105	342
440	•	**Pentair** (St. Paul)	545,438	282,486	459	21,245	390	119,327	458
441	422	**Smithfield Foods** (Arlington, Va.)[16]	541,641	91,237	494	2,435	444	18,399	490
442	474	**Snap-on Tools** (Kenosha, Wis.)	539,933	418,922	404	59,629	243	298,574	330
443	449	**Georgia Kraft** (Rome, Ga.)	539,746	635,019	320	30,737	350	351,562	306
444	468	**Guardian Industries** (Northville, Mich.)	536,930	518,182	353	39,846	303	227,569	377
445	500	**Tandem Computers** (Cupertino, Calif.)[8]	532,620	501,873	364	42,908	289	375,122	294
446	489	**Macmillan** (New York)	529,653	429,272	400	33,078	340	173,094	423
447	496	**Moore McCormack Resources** (Stamford, Conn.)	528,848	994,411	256	19,029	394	381,180	290
448	•	**Carpenter Technology** (Reading, Pa.)[5]	528,824	562,710	335	33,441	338	307,208	323
449	•	**Carlisle** (Cincinnati)	527,177	287,037	458	32,518	346	183,376	416
450	466	**Rorer Group** (Fort Washington, Pa.)	522,110	457,894	387	44,283	283	236,478	370

• Indicates that a corporation was not among the 500 in 1983.

¶ Includes sales from discontinued operations of at least 10%; see the explanation of "sales" on page 316.

N.A. Not available.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
4,847†	436	9.8	42	27.6	22	4.63	4.37	1.63	11.00	160	(6.83)	291	16.10	267	36
9,300	303	4.8	225	15.0	198	7.32	5.30	1.88	14.56	94	12.00	128	24.12	137	22
4,500	446	5.3	157	18.2	106	2.93	0.98	1.61	6.19	243	(5.36)	278	23.29	153	26
N.A.		—		—		N.A.	2.40	1.03	—		(6.92)	293	7.56	389	42
8,867	315	5.9	153	11.5	293	3.84	3.23	1.20	12.37	127	(24.92)	399	7.99	381	36
3,500	466	4.3	259	13.5	245	0.80	1.62	N.A.	—		(12.67)	348	—		41
8,300	335	8.0	82	15.4	106	1.69	1.71	0.54	12.14	133	6.12	172	20.16	199	33
7,900	346	3.9	299	6.5	394	2.23	(0.35)	1.67	2.93	295	19.21	82	21.13	183	33
5,800	403	4.8	227	14.9	204	1.93	1.77	0.64	11.74	145	(9.14)	314	23.53	146	28
8,600†	326	3.5	320	16.7	146	4.84	6.27	0.34	30.42	12	3.44	192	26.31	97	37
5,887	402	2.1	385	10.5	313	1.03	0.77	0.88	1.55	307	(4.99)	269	18.09	229	33
6,900	368	6.2	144	19.8	71	4.92	3.68	1.94	9.75	185	17.41	94	18.75	221	41
9,229	305	4.9	219	12.6	263	1.66	N.A.	N.A.	—		—		—		26
10,000	293	3.7	310	17.4§	126	1.41	1.25	0.43	12.65	125	27.35	38	35.49	30	20
4,616†	445	—		—		(0.79)	2.64	3.04	—		(1.10)	240	7.01	394	33
8,431	332	4.7	230	8.0	364	1.37	0.40	0.46**	11.53	150	(26.36)	407	30.28	57	44
10,130	290	11.2	29	—		6.54**	0.67**	0.04	66.48	1	(18.75)	372	0.19	438	44
3,344	470	—		—		(6.01)	1.91	5.30	—		(24.38)	397	2.50	428	10
7,870	347	1.9	400	6.9	387	2.01	3.23	1.34	4.14	281	(12.28)	344	25.93	106	34
8,100	343	10.1	39	15.9	170	2.40	1.99	0.95	9.65	189	5.72	176	16.08	269	34
5,171	425	3.4	327	16.1	164	4.22	3.48**	2.68	4.64	272	12.94	120	9.73	367	44
1,268	490	2.9	347	18.0	109	5.17	7.38	(3.55)	—		(5.35)	277	26.06	103	20
5,600	408	6.7	119	17.3	130	5.60	5.12	2.30	9.28	196	18.86	87	17.36	242	20
13,067	240	12.2	18	25.5	26	1.23	0.39	0.07	32.71	7	(12.27)	342	70.89	1	36
8,477	330	1.8	407	7.0	383	2.05	2.34	2.12	(0.34)	326	(16.12)	363	15.05	283	34
15,000	228	2.5	371	14.2	223	4.05	3.16	2.57	4.65	271	(4.46)	265	20.46	192	23
4,900	435	4.9	218	16.1	165	1.56	1.20	0.59	10.14	173	(16.97)	365	35.62	29	33
13,449	237	4.3	254	20.8	54	2.17	1.96	0.91	9.02	205	(37.58)	445	41.26	18	23
10,961	274	0.7	431	2.4	435	1.07	3.89	0.39	10.62	167	(10.20)	322	23.49	147	22
5,900	399	3.1	336	17.3	132	2.80	1.82	(0.53)	—		(32.84)	430	27.74	75	45
5,535	409	—		—		(1.26)	1.50	1.47	—		(20.84)	383	18.66	222	34
4,408	447	8.3	57	19.6	77	2.77	2.30	0.40	21.35	35	15.73	106	22.77	164	30
9,000	309	2.2	388	7.4	377	1.41**	(0.35)**	5.18	(12.20)	379	24.75	52	3.82	421	22
10,560	279	3.7	313	11.7	289	2.02	2.80	0.67	11.72	146	(30.88)	422	21.89	172	23
8,670	323	—		—		(1.26)	(2.93)	1.85	—		(6.45)	299	10.47	359	38
6,530	378	7.5	98	15.7	174	1.44	1.24	0.09	32.14	8	(14.12)	357	58.38	4	44
4,805	437	4.4	245	15.3	188	2.46	2.15	(0.21)	—		11.84	130	35.36	31	30
772	492	—		—		N.A.	N.A.	N.A.	—		—		—		20
7,000	367	7.3	105	14.3	220	5.60	5.07	1.24	16.27	73	16.44	100	26.04	104	27
4,800	439	3.9	293	17.8	114	3.43	2.40	1.60	7.92	224	2.19	199	—		26
3,150	473	0.5	440	13.2	254	0.86	1.00	(3.11)	—		(11.59)	333	—		20
5,900	400	11.0	32	20.0	68	2.93	2.12	0.60	17.09	66	16.03	105	16.00	271	34
3,295	471	5.7	169	8.7	354	N.A.	N.A.	N.A.	—		—		—		26
5,358	420	7.4	99	17.5	123	1.79	1.68	0.31	19.15	49	13.66	116	37.23	25	32
5,223	423	8.1	80	11.4	296	1.04	0.76	N.A.	—		(44.48)	452	—		44
6,600	376	6.3	127	19.1	86	3.45	2.60	1.10	12.06	138	68.36	5	35.32	32	27
3,600	463	3.6	315	5.0	414	1.80	1.33	2.59	(3.59)	344	(0.90)	236	17.09	245	32
4,933	433	6.3	135	10.9	305	3.84	1.86	2.07	6.37	240	(21.67)	386	23.63	142	33
5,116†	427	6.2	143	17.7	117	3.51	2.45	0.79	16.12	76	25.64	48	34.86	35	30
5,979	393	8.5	57	18.7	93	2.08	2.02	1.89	0.96	310	(12.96)	349	12.61	333	42

RANK 1984	 1983	COMPANY	SALES $ THOUSANDS	ASSETS $ THOUSANDS	 RANK	NET INCOME $ THOUSANDS	 RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	 RANK
451	463	**Coachmen Industries** (Elkhart, Ind.)	521,268	132,159	489	14,742	417	90,046	471
452	482	**Dorsey** (Chattanooga, Tenn.)	520,484	207,515	486	7,864	432	59,070	482
453	486	**Bairnco** (New York)	520,087	363,353	436	26,139	371	150,728	438
454	447	**Sun-Diamond Growers of California** (Stockton, Calif.)[14]	517,433	280,857	460	N.A.[15]		67,931	477
455	442	**Foxboro** (Foxboro, Mass.)	515,856	470,439	379	4,272	440	291,985	334
456	495	**Tracor** (Austin, Tex.)	515,724	341,484	442	33,235	339	182,767	417
457	307	**Cameron Iron Works** (Houston)[5]	513,544	851,832	283	(178,645)	475	341,086	309
458	●	**Nortek** (Providence)	506,179	431,139	398	16,900	408	127,343	448
459	473	**Phillips-Van Heusen** (New York)[29]	505,885	235,843	479	17,262	407	124,465	454
460	478	**Ametek** (New York)	503,925	337,062	445	42,697	290	200,912	403
461	471	**Liquid Air** (San Francisco)	501,735	584,823	330	27,304	365	257,669	357
462	494	**Sealed Power** (Muskegon, Mich.)	500,085	339,391	443	41,300	299	236,902	369
463	460	**American Bakeries** (New York)	499,391	103,422	491	6,217	435	44,128	484
464	491	**Pittway** (Northbrook, Ill.)	490,880	365,870	432	31,683	347	235,181	371
465	458	**Hillenbrand Industries** (Batesville, Ind.)[20]	484,609	391,774	416	38,410	311	234,957	372
466	●	**Longview Fibre** (Longview, Wash.)[11]	483,004	480,600	373	22,183	384	207,642	395
467	●	**North American Coal** (Cleveland)	479,479	984,743	260	26,359	370	129,246	446
468	470	**International Flavors & Fragrances** (New York)	476,678	452,392	389	69,242	216	351,182	307
469	483	**Diebold** (Canton, Ohio)	474,057	383,113	423	56,900	247	281,703	338
470	●	**NERCO** (Portland, Ore.)[36]	470,900	772,900	292	54,100	256	278,100	343
471	●	**Stanadyne** (Windsor, Conn.)	470,737	300,175	454	32,525	337	185,163	414
472	490	**Harvey Hubbell** (Orange, Conn.)	467,133	349,605	440	42,001	293	246,262	361
473	493	**H.B. Fuller** (St. Paul)[20]	461,127	236,489	478	11,895	424	99,908	468
474	480	**Wisconsin Dairies Cooperative** (Baraboo, Wis.)[9]	460,946	95,279	492	N.A.		45,348	483
475	●	**Harris Graphics** (Melbourne, Fla.)[5]	460,452	350,049	439	16,213	410	38,315	487
476	441	**Shaklee** (San Francisco)[9]	459,115	260,660	468	13,207	420	154,451	437
477	467	**Palm Beach** (Cincinnati)	458,961	257,842	469	10,038	431	97,082	469
478	●	**Ocean Spray Cranberries** (Plymouth, Mass.)[22]	457,031	257,726	470	N.A.[15]		88,656	472
479	●	**Coleman** (Wichita)	454,489	313,992	451	16,180	411	157,830	435
480	●	**Shaw Industries** (Dalton, Ga.)[5]	454,198	216,984	482	22,909	383	101,936	467
481	●	**Winn Enterprises** (Los Angeles)[9]	452,532	434,261	396	1,295	448	14,790	491
482	479	**Meredith** (Des Moines)[5]	450,623	431,932	397	38,417	310	228,929	374
483	●	**Gifford-Hill** (Dallas)	444,376	468,306	380	10,957	428	201,576	402
484	●	**Copperweld** (Pittsburgh)	442,154	371,136	428	4,533**	439	160,028	434
485	●	**United States Tobacco** (Greenwich, Conn.)	441,405	408,465	409	83,727	188	281,091	339
486	●	**Jostens** (Minneapolis)[5]	440,363	269,827	464	33,786	335	170,626	426
487	●	**Management Assistance** (New York)[8]	437,611	238,423	476	(8,213)	455	80,923	475
488	498	**Riegel Textile** (Greenville, S.C.)[8]	435,185	253,957	471	(16,088)	458	125,838	452
489	●	**Leggett & Platt** (Carthage, Mo.)	435,175	232,919	480	20,771	391	107,883	463
490	492	**Oak Industries** (Rancho Bernardo, Calif.)	435,000[30]	N.A.		N.A.		N.A.	
491	●	**Manhattan Industries** (New York)[29]	432,992	198,384	487	11,547	426	73,290	476
492	●	**Katy Industries** (Elgin, Ill.)	431,517	366,652	431	(36,562)	461	140,772	441
493	448	**Universal Foods** (Milwaukee)[9]	430,124	245,836	475	12,159	423	119,245	459
494	●	**Butler Manufacturing** (Kansas City, Mo.)	428,029	249,888	473	2,708	443	140,261	442
495	●	**Wyman-Gordon** (Worcester, Mass.)	425,459	442,049	391	35,362	328	331,578	312
496	●	**Medtronic** (Minneapolis)[16]	422,737	459,852	386	59,123	245	335,414	310
497	●	**Lancaster Colony** (Columbus, Ohio)[5]	418,492	266,705	465	12,973	421	108,825	461
498	●	**Loral** (New York)[9]	418,340	412,827	408	33,893	334	224,946	379
499	●	**C.R. Bard** (Murray Hill, N.J.)	416,865	328,744	448	35,254	329	222,433	381
500	●	**Lukens** (Coatesville, Pa.)	416,384	308,015	452	4,701	437	125,845	451
		TOTALS	1,758,721,251	1,409,365,773		86,402,025		636,932,682	

● Indicates that a corporation was not among the 500 in 1983.

N.A. Not available.

** Reflects an extraordinary credit of at least 10%; see the explanation of "net income" and "earnings per share" on page 316.

† Average for the year; see the reference to "employees" on page 316.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[36] Subsidiary of PacifiCorp.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS				INDUSTRY CODE
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE		
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK	
3,632	461	2.8	354	16.4	153	1.70	2.78	0.11	31.20	9	(31.63)	425	37.92	24	37
6,100	386	1.5	416	12.9§	260	2.06	3.02	0.72	11.08	158	(26.79)	409	24.54	126	30
5,067†	429	5.0	211	17.3	129	2.62	2.39	0.34	22.78	27	24.31	55	43.68	13	36
2,750†	479	—		—		N.A.	N.A.	N.A.	—		—		—		20
10,200	289	0.8	430	1.5	443	0.35	0.65	0.90	(8.99)	375	(11.94)	338	14.34	301	38
9,100	306	6.4	127	18.2	105	2.15	1.60	0.20**	26.51	20	2.15	200	50.93	8	36
6,817	370	—		—		(5.89)	0.11	0.84	—		(35.34)	437	4.30	416	45
4,658	442	3.3	329	13.3	253	2.44	1.36	0.64	14.32	97	(8.54)	305	26.96	88	34
8,500	328	3.4	324	13.9	238	2.94	1.54	0.70	15.35	33	12.89	121	34.78	36	23
6,100	385	8.5	58	21.3	50	1.96	1.74**	0.55	13.50	109	(9.64)	317	30.19	58	38
4,119	454	5.4	182	10.1§	330	2.07	1.80	N.A.	—		1.59	209	—		28
5,445†	415	8.3	68	17.4	124	3.38	2.38	0.58	19.19	48	0.56	219	30.34	56	40
5,888	401	1.2	422	14.1	228	2.36	1.63**	(0.92)	—		24.78	51	24.22	133	20
6,300	382	6.5	125	13.5	247	6.85	5.60	2.03	12.95	117	19.42	77	24.18	134	36
5,900	397	7.9	86	16.4	154	1.95	1.78	0.58	12.79	120	(13.96)	355	24.97	116	47
3,250	472	4.6	238	10.7	306	2.00	1.56	19.21	(20.25)	388	(13.22)	351	12.37	335	26
2,995	476	5.5	179	20.4	62	8.28	6.47	1.48	18.75	52	0.46	221	15.33	279	10
3,696	459	14.5	6	19.7	73	1.89	1.87	0.86	8.16	217	6.72	170	4.37	415	43
5,505	411	12.0	22	20.2	65	4.35	3.77	0.76	19.03	50	(6.02)	287	27.19	83	36
2,200	485	11.5	24	19.5	78	1.74	1.34	N.A.	—		—		—		10
4,944	432	7.1	108	18.1	108	3.50	2.30	1.39	9.67	188	14.84	110	21.46	178	33
5,170	426	9.0	48	16.2§	160	3.37	2.60	1.25	10.44	168	18.74	88	24.16	135	36
4,300	450	2.6	366	11.9	284	1.28	1.49	0.59	7.96	223	(24.93)	400	26.88	89	28
610	493	—		—		N.A.	N.A.	N.A.	—		—		—		20
4,400	448	3.5	319	42.3	6	1.95	N.A.	N.A.	—		—		—		45
1,400	489	2.9	351	8.6	357	1.01	2.71	0.24	15.45	81	(31.69)	426	25.50	109	20
6,600	377	2.2	389	10.3	323	2.71	3.60	0.86	12.21	132	31.90	28	40.11	19	23
1,649†	487	—		—		N.A.	N.A.	N.A.	—		—		—		20
5,519	410	3.6	316	10.3	324	2.37	2.61	0.48	17.31	64	(25.14)	401	23.60	144	45
4,642	443	5.0	209	22.5	34	2.70	1.42	1.01	10.33	171	(11.05)	330	30.43	54	22
2,260	484	0.3	445	8.8	353	0.19	N.A.	N.A.	—		(55.10)	461	4.62	414	20
5,000	431	8.5	55	16.8	143	4.08	3.56	0.85	17.03	67	25.68	46	38.69	22	27
3,800	457	2.5	372	5.4	407	1.27	0.40	2.05	(4.69)	349	37.35	21	21.91	170	32
2,999	475	1.0	428	2.8	428	0.24**	(2.64)	2.17	(19.76)	386	(37.19)	444	12.83	328	33
3,673†	460	19.0	1	29.8	15	2.86	2.42	0.53	18.29	56	0.16	225	29.20	65	21
7,260†	361	7.7	94	19.8	72	2.50	1.50	0.40	20.01	44	21.95	65	32.71	44	46
6,200	383	—		—		(1.12)	0.01	0.40	—		51.75	9	—		44
7,400	357	—		—		(4.29)	2.13	2.31	—		(28.70)	415	19.32	210	22
6,700	373	4.8	226	19.3	84	2.28	1.96	0.43	18.25	57	(3.43)	260	30.65	52	25
N.A.		—		—		N.A.	(10.17)	0.90	—		(57.45)	462	5.66	403	36
5,728	405	2.7	362	15.8	173	3.01	2.00	0.20	30.85	11	(35.53)	438	28.54	69	23
6,607	374	—		—		(6.48)	1.92	1.76**	—		(22.41)	389	22.79	162	20
2,700	480	2.8	355	10.2	328	1.71	2.91	0.90	6.66	235	(5.13)	272	23.25	154	20
3,408	468	0.6	433	1.9	440	0.51	(1.36)	3.44	(17.38)	385	8.28	155	12.23	337	34
3,500	467	8.3	66	10.7	307	1.83	2.41	0.51	13.71	104	(17.19)	366	—		34
5,219	424	14.0	10	17.6	118	3.64	3.34	0.48	22.46	31	(33.16)	431	9.53	370	36
6,400	380	3.1	337	11.9	283	1.63	1.62	0.66	9.43	193	(10.11)	319	29.33	63	30
5,656	407	8.1	76	15.1	196	1.45	1.28	0.10	30.99	10	7.41	164	49.36	11	36
6,000	390	8.5	60	15.9	171	2.33	2.21	0.65	13.56	108	(33.57)	434	13.09	326	38
3,586†	464	1.1	426	3.7	425	0.91	(2.71)	2.19	(8.41)	372	(16.64)	364	5.58	405	33
14,195,792															

WHO DID BEST AND WORST AMONG THE 500

TOTAL RETURN TO INVESTORS, 1984

THE TEN HIGHEST

	Sales rank	
Tyson Foods	364	118.67%
Mattel	334	105.00
Hasbro Bradley	373	101.87
Harcourt Brace Jovanovich	376	69.91
Macmillan	446	68.36
Avco	176	59.29
Data General	279	57.72
Digital Equipment	65	53.82
Management Assistance	487	51.75
G.D. Searle	266	50.77

THE FIVE LOWEST

Storage Technology	340	-83.49%
Tosco	189	-80.00
Allis-Chalmers	253	-64.66
Inspiration Resources	329	-58.89
Oak Industries	490	-57.45

THE INDUSTRY MEDIANS

Publishing, printing	16.44%
Beverages	16.44
Food	16.31
Tobacco	15.82
Aerospace	11.12
Pharmaceuticals	7.78
Soaps, cosmetics	5.67
Petroleum refining	2.74
Glass, concrete, abrasives, gypsum	2.25
Chemicals	1.59
Shipbuilding, railroad and transportation equipment	.91
Motor vehicles and parts	-1.46
Metal products	-1.74
Paper, fiber, and wood products	-3.70
Measuring, scientific, photographic equipment	-5.23
Musical instruments, toys, sporting goods	-6.00
Electronics, appliances	-6.02
Apparel	-6.93
Office equipment (includes computers)	-7.60
Rubber, plastic products	-8.17
Mining, crude-oil production	-8.41
Industrial and farm equipment	-8.86
Textiles, vinyl flooring	-10.20
Metal manufacturing	-21.67
Furniture	N.A.
Jewelry, silverware	N.A.
Leather	N.A.
All Industries	*-.75*

TOTAL RETURN TO INVESTORS, 1974-84 AVERAGE

THE TEN HIGHEST

	Sales rank	
Advanced Micro Devices	424	70.89%
Prime Computer	400	66.32
Hasbro Bradley	373	63.84
Computervision	436	58.38
Wang Laboratories	165	55.92
Tyson Foods	364	52.80
MEI	369	52.74
Tracor	456	50.93
Teledyne	113	50.31
ConAgra	121	49.51

THE FIVE LOWEST

Tosco	189	-6.99%
Manville	204	-6.57
Inspiration Resources	329	-5.46
International Harvester	79	-4.46
Phelps Dodge	306	-3.83

THE INDUSTRY MEDIANS

Apparel	27.70%
Publishing, printing	27.08
Aerospace	26.76
Shipbuilding, railroad and transportation equipment	26.31
Musical instruments, toys, sporting goods	25.28
Rubber, plastic products	21.90
Office equipment (includes computers)	21.84
Beverages	21.67
Motor vehicles and parts	20.72
Electronics, appliances	20.63
Textiles, vinyl flooring	20.42
Tobacco	20.27
Paper, fiber, and wood products	19.56
Food	19.35
Industrial and farm equipment	18.63
Glass, concrete, abrasives, gypsum	17.09
Metal products	16.18
Mining, crude-oil production	14.77
Chemicals	14.71
Petroleum refining	14.67
Measuring, scientific, photographic equipment	14.04
Metal manufacturing	12.83
Pharmaceuticals	8.47
Soaps, cosmetics	6.54
Leather	N.A.
Jewelry, silverware	N.A.
Furniture	N.A.
All Industries	*18.65*

RETURN ON STOCKHOLDERS' EQUITY

THE TEN HIGHEST

	Sales rank	
Weirton Steel	289	100.0%
Chrysler	14	72.0
Mattel	334	56.5
Kellogg	143	51.4
Teledyne	113	49.5
Harris Graphics	475	42.3
Wilson Foods	192	38.6
Colt Industries	195	38.5
General Dynamics	44	35.9
EG&G	291	35.7

THE INDUSTRY MEDIANS

	1984	1983
Tobacco	23.8%	N.A.%
Publishing, printing	18.4	17.8
Pharmaceuticals	18.1	17.5
Soaps, cosmetics	17.4	14.7
Food	16.2	14.5
Beverages	15.7	16.9
Motor vehicles and parts	15.4	9.9
Electronics, appliances	14.5	12.0
Shipbuilding, railroad and transportation equipment	14.3	13.2
Musical instruments, toys, sporting goods	14.2	.0
Measuring, scientific, photographic equipment	14.0	9.9
Aerospace	13.9	13.4
Apparel	13.9	13.0
Mining, crude-oil production	13.8	9.8
Office equipment (includes computers)	12.6	11.1
Paper, fiber, and wood products	12.4	7.1
Chemicals	12.2	9.8
Rubber, plastic products	12.1	10.0
Industrial and farm equipment	11.8	2.6
Metal products	11.7	9.5
Glass, concrete, abrasives, gypsum	9.5	8.0
Petroleum refining	9.5	9.5
Textiles, vinyl flooring	8.2	8.7
Metal manufacturing	7.1	.0
Leather	N.A.	N.A.
Furniture	N.A.	N.A.
Jewelry, silverware	N.A.	N.A.
All Industries	*13.6*	*10.7*

WHO DID BEST AND WORST AMONG THE 500

RETURN ON SALES

THE TEN HIGHEST

	Sales rank	
United States Tobacco	485	19.0%
Joseph E. Seagram & Sons	238	18.3
SmithKline Beckman	136	17.1
Teledyne	113	16.4
Eli Lilly	130	15.8
International Flavors & Fragrances	468	14.5
Capital Cities Communications	313	14.4
International Business Machines	6	14.3
American Home Products	78	14.2
Medtronic	496	14.0

THE INDUSTRY MEDIANS

	1984	1983
Pharmaceuticals	10.0%	10.4%
Tobacco	9.8	N.A.
Publishing, printing	8.4	7.5
Office equipment (includes computers)	6.6	5.7
Mining, crude-oil production	6.3	6.6
Beverages	6.0	6.0
Soaps, cosmetics	5.8	5.5
Electronics, appliances	5.7	4.8
Measuring, scientific, photographic equipment	5.6	5.1
Musical instruments, toys, sporting goods	5.4	.0
Motor vehicles and parts	5.2	3.4
Paper, fiber, and wood products	4.8	3.7
Aerospace	4.3	3.6
Metal products	4.3	4.0
Chemicals	4.3	3.4
Petroleum refining	4.0	3.3
Glass, concrete, abrasives, gypsum	4.0	3.4
Industrial and farm equipment	3.9	1.7
Textiles, vinyl flooring	3.8	3.2
Apparel	3.5	3.6
Rubber, plastic products	3.3	3.1
Shipbuilding, railroad and transportation equipment	3.3	3.2
Metal manufacturing	3.0	.0
Food	2.9	2.7
Furniture	N.A.	N.A.
Leather	N.A.	N.A.
Jewelry, silverware	N.A.	N.A.
All Industries	*4.5*	*3.8*

CHANGES IN SALES

THE TEN BIGGEST INCREASES

	Sales rank	
Hasbro Bradley	373	219.0%
Stone Container	267	89.7
Mack Trucks	174	73.0
Pentair	440	70.8
Fort Howard Paper	250	70.3
Fleetwood Enterprises	244	65.5
Advanced Micro Devices	424	62.8
PACCAR	163	59.2
Apple Computer	234	54.2
LTV	48	53.9

THE TEN BIGGEST DECREASES

Cameron Iron Works	457	46.1%
Mattel	334	34.4
Land O'Lakes	161	30.2
Northwest Industries	242	27.5
Tosco	189	23.8
National Intergroup	159	23.3
Time Inc.	132	23.1
Crane	352	21.0
Todd Shipyards	410	21.0
Occidental Petroleum	18	19.6

THE INDUSTRY MEDIANS

	Increases
Shipbuilding, railroad and transportation equipment	29.4%
Motor vehicles and parts	20.9
Metal manufacturing	18.3
Industrial and farm equipment	16.8
Rubber, plastic products	16.6
Metal products	15.7
Paper, fiber, and wood products	13.5
Glass, concrete, abrasives, gypsum	13.2
Musical instruments, toys, sporting goods	12.5
Publishing, printing	12.1
Electronics, appliances	12.0
Office equipment (includes computers)	11.5
Aerospace	11.3
Textiles, vinyl flooring	9.4
Apparel	7.8
Measuring, scientific, photographic equipment	7.8
Mining, crude-oil production	7.4
Chemicals	7.2
Food	6.8
Soaps, cosmetics	4.8
Tobacco	4.0
Beverages	3.7
Pharmaceuticals	3.6
Petroleum refining	2.6
Furniture	N.A.
Leather	N.A.
Jewelry, silverware	N.A.

CHANGES IN PROFITS

THE TEN BIGGEST INCREASES*

	Sales rank	
Timken	282	8590.0%
Cummins Engine	155	3542.3
Brockway	309	2885.3
Dresser Industries	104	1796.1
Joy Manufacturing	388	1027.1
Fruehauf	138	916.8
Beatrice Foods	36	902.3
AM International	417	880.9
Penn Central	145	762.9
Rexnord	322	618.8

THE TEN BIGGEST DECREASES*

Fairchild Industries	332	95.1%
GenCorp	140	89.3
Crown Central Petroleum	221	87.5
Baxter Travenol Laboratories	207	86.7
Control Data	71	80.5
Levi Strauss	149	78.7
FMC	119	77.5
Texaco	5	75.2
Fieldcrest Mills	429	72.5
Gould	230	72.2

THE INDUSTRY MEDIANS

	Increases
Musical instruments, toys, sporting goods	156.1%
Industrial and farm equipment	83.4
Metal manufacturing	76.4
Glass, concrete, abrasives, gypsum	65.0
Motor vehicles and parts	60.3
Paper, fiber, and wood products	38.4
Rubber, plastic products	31.5
Metal products	28.5
Aerospace	28.0
Office equipment (includes computers)	24.4
Chemicals	23.1
Electronics, appliances	22.6
Publishing, printing	17.9
Measuring, scientific, photographic equipment	16.8
Textiles, vinyl flooring	16.2
Shipbuilding, railroad and transportation equipment	14.9
Tobacco	12.3
Apparel	10.7
Food	10.0
Pharmaceuticals	7.7
Petroleum refining	2.5
Soaps, cosmetics	1.2
Mining, crude-oil production	1.1
	Decreases
Beverages	3.6
Leather	N.A.
Jewelry, silverware	N.A.
Furniture	N.A.

* Listings exclude money losers.

SALES PER DOLLAR OF STOCKHOLDERS' EQUITY

THE TEN HIGHEST

	Sales rank	
Coleco Industries	361	$73.78
Wien Enterprises	481	30.60
Smithfield Foods	441	29.44
Wilson Foods	192	28.41
Swift Independent	135	23.84
Michigan Milk Producers Assoc.	438	19.95
Frederick & Herrud	391	19.56
Weirton Steel	289	17.73
Monfort of Colorado	241	17.60
Pabst Brewing	399	16.27

THE FIVE LOWEST

Phelps Dodge	306	$1.18
Joseph E. Seagram & Sons	238	0.53
Newmont Mining	362	0.52
International Harvester	79	-11.55
AM International	417	-37.33

THE INDUSTRY MEDIANS

Shipbuilding, railroad and transportation equipment	$5.28
Food	5.15
Apparel	3.71
Aerospace	3.70
Motor vehicles and parts	3.46
Textiles, vinyl flooring	3.33
Rubber, plastic products	3.21
Petroleum refining	3.15
Musical instruments, toys, sporting goods	3.00
Beverages	2.99
Metal products	2.96
Metal manufacturing	2.84
Soaps, cosmetics	2.72
Paper, fiber, and wood products	2.60
Chemicals	2.58
Industrial and farm equipment	2.46
Electronics, appliances	2.44
Glass, concrete, abrasives, gypsum	2.44
Tobacco	2.27
Publishing, printing	2.18
Measuring, scientific, photographic equipment	2.00
Office equipment (includes computers)	1.96
Pharmaceuticals	1.93
Mining, crude-oil production	1.74
Furniture	N.A.
Jewelry, silverware	N.A.
Leather	N.A.
All industries	*2.78*

ASSETS PER EMPLOYEE

THE TEN HIGHEST

	Sales rank	
Louisiana Land & Exploration	249	$1,929,463
Chevron	11	962,845
National Coop. Refinery Assoc.	371	796,457
Amerada Hess	41	721,421
Shell Oil	13	683,853
National Intergroup	159	629,549
Coastal	55	619,033
Mitchell Energy & Development	315	582,764
Phillips Petroleum	17	579,010
Atlantic Richfield	12	561,675

THE FIVE LOWEST

Kellwood	426	$21,030
Interstate Bakeries	383	17,837
EG&G	291	17,606
American Bakeries	463	17,565
Oxford Industries	428	17,137

THE INDUSTRY MEDIANS

Petroleum refining	$421,853
Mining, crude-oil production	318,490
Chemicals	118,520
Paper, fiber, and wood products	116,618
Beverages	104,165
Tobacco	103,128
Metal manufacturing	91,280
Pharmaceuticals	91,264
Publishing, printing	81,358
Glass, concrete, abrasives, gypsum	79,925
Soaps, cosmetics	77,303
Office equipment (includes computers)	68,809
Industrial and farm equipment	66,231
Metal products	64,089
Food	62,209
Motor vehicles and parts	61,910
Musical instruments, toys, sporting goods	59,043
Measuring, scientific, photographic equipment	58,983
Aerospace	57,329
Rubber, plastic products	57,175
Electronics, appliances	55,635
Textiles, vinyl flooring	41,070
Shipbuilding, railroad and transportation equipment	40,509
Apparel	29,731
Furniture	N.A.
Jewelry, silverware	N.A.
Leather	N.A.
All industries	*72,489*

SALES PER EMPLOYEE

THE TEN HIGHEST

	Sales rank	
Louisiana Land & Exploration	249	$1,673,533
National Coop. Refinery Assoc.	371	1,327,629
Tosco	189	1,261,187
Coastal	55	1,169,302
Amerada Hess	41	939,948
National Intergroup	159	914,043
Wisconsin Dairies Cooperative	474	755,649
Michigan Milk Producers Assoc.	438	716,742
Chevron	11	709,674
Texaco	5	695,189

THE FIVE LOWEST

Scott & Fetzer	378	$42,495
National Semiconductor	225	39,645
Kellwood	426	38,833
VF	278	36,709
General Instrument	227	36,295

THE INDUSTRY MEDIANS

Petroleum refining	$390,973
Mining, crude-oil production	181,629
Food	146,412
Beverages	143,751
Paper, fiber, and wood products	129,497
Chemicals	129,107
Metal manufacturing	123,198
Tobacco	121,092
Soaps, cosmetics	114,719
Glass, concrete, abrasives, gypsum	112,520
Rubber, plastic products	100,571
Shipbuilding, railroad and transportation equipment	99,032
Metal products	97,447
Motor vehicles and parts	95,643
Pharmaceuticals	93,941
Publishing, printing	92,156
Aerospace	88,145
Industrial and farm equipment	82,350
Musical instruments, toys, sporting goods	77,197
Office equipment (includes computers)	73,841
Electronics, appliances	72,298
Measuring, scientific, photographic equipment	71,766
Textiles, vinyl flooring	62,577
Apparel	52,845
Furniture	N.A.
Jewelry, silverware	N.A.
Leather	N.A.
All industries	*100,614*

THE MONEY LOSERS

	1984 sales rank	Loss
A.H. Robins	404	$461,600,000
Caterpillar Tractor	52	428,000,000*
LTV	48	371,200,000*
Asarco	254	306,080,000
Armco	82	295,000,000*
Phelps Dodge	306	276,846,000*
AMAX	153	238,300,000*
Tosco	189	210,697,000*
Martin Marietta	85	191,764,000
Cameron Iron Works	457	178,645,000
Ashland Oil	42	172,478,000
NL Industries	248	141,128,000*
Hughes Tool	271	133,839,000*
Bethlehem Steel	68	112,500,000*
Inspiration Resources	329	101,291,000*
Coleco Industries	361	79,818,000*
White Consolidated Industries	172	79,334,000
Smith International	365	68,451,000*
International Harvester	79	55,441,000*
Kaiser Aluminum & Chemical	114	53,900,000*
Westmoreland Coal	418	49,430,000
A.O. Smith	323	43,161,000
Inland Steel	116	41,366,000*
Katy Industries	492	36,662,000
Midland-Ross	337	35,299,000*
Anchor Hocking	375	18,624,000*
Riegel Textile	488	16,088,000
Sybron	435	10,828,000*
Easco	431	9,002,000
Management Assistance	487	8,213,000
Champion International	70	5,968,000
Chromalloy American	303	4,628,000*
Lafarge	318	4,586,000*
Revere Copper & Brass	415	4,488,000

* Also lost money in 1983.

ARRIVALS AND DEPARTURES

NEWCOMERS TO THE 500

	Sales rank
Advanced Micro Devices	454
American Tel. & Tel.	8
Bard (C.R.)	499
Carlisle	449
Coleman	479
Computervision	436
Esselte Business Systems	413
Hanson Industries North America	201
Harris Graphics	475
Hasbro Bradley	373
Jefferson Smurfit	387
Jostens	486
Katy Industries	492
Lancaster Colony	497
Leggett & Platt	489
Longview Fibre	466
Lord	498
Lukens	500
Management Assistance	487
Manhattan Industries	491
Medtronic	496
Nortek	458
NERCO	470
Ocean Spray Cranberries	478
Pentair	440
Shaw Industries	480
Temple-Inland	264
United States Tobacco	485
Weirton Steel	289
Winn Enterprises	481

RETURNED TO THE 500*

Butler Manufacturing (1982: 497)	494
Carpenter Technology (1982: 458)	448
Copperweld (1981: 424)	464
Gifford-Hill (1982: 471)	483
North American Coal (1982: 461)	467
Stanadyne (1979: 496)	471
Wyman-Gordon (1982: 463)	495

* Figures in parentheses indicate year and sales rank the last time the company was listed.

DISPLACED FROM THE 500

	1983 sales rank
ACF Industries[1]	416
AT&T Technologies[2]	26
Bangor Punta[3]	438
Blue Bell[1]	259
Bucyrus-Erie	434
Carnation[4]	116
Charter[5]	61
Continental Group[6]	68
Cooper Labs	476
Dr Pepper[1]	432
Esmark[7]	88
Genesco[5]	394
Getty Oil[8]	24
Gulf Oil[9]	11
Hanson Industries[10]	309
Harte-Hanks Communications[11]	485
Holly	484
Hyster[12]	497
Kaiser Steel	396
Kane-Miller[1]	353
Masonite[13]	499
NI Industries[14]	368
Norton Simon[15]	136
Prentice-Hall[16]	477
Pacific Resources[5]	225
Peabody International	481
Republic Steel[17]	145
Royal Crown Companies[18]	459
St. Regis[19]	141
Stokely-Van Camp[20]	444
Superior Oil[21]	196
Trane[22]	284
Trinity Industries	465
Union Pacific[5]	40
U.S. Industries[23]	283
Warner Communications[5]	114
Williams Companies[5]	172

[1] Figures no longer made public.

[2] Consolidated into American Tel. & Tel.

[3] Acquired by Lear Siegler (rank: 187) February 1, 1984.

[4] Acquired by Nestlé (1983 International rank: 22) January 30, 1985.

[5] No longer classified as an industrial.

[6] Acquired by Kiewit-Murdock Investment Corp. November 1, 1984.

[7] Acquired by Beatrice (rank: 36) August 7, 1984.

[8] Acquired by Texaco (rank: 5) February 17, 1984.

[9] Acquired by Chevron (rank: 11) June 15, 1984.

[10] Consolidated into Hanson Industries North America (rank: 201).

[11] Acquired by HH Acquiring September 11, 1984.

[12] Acquired by ESCO February 16, 1984.

[13] Acquired by U.S. Gypsum (rank: 155) May 1, 1984.

[14] Acquired by Masco (rank: 299) March 8, 1985.

[15] Acquired by Esmark (now part of Beatrice) July 31, 1984.

[16] Acquired by Gulf & Western (rank: 77) December 21, 1984.

[17] Acquired by LTV (rank: 48) June 29, 1984.

[18] Acquired by Chesapeake Financial July 1, 1984.

[19] Acquired by Champion International (rank: 70) November 20, 1984.

[20] Acquired by Quaker Oats (rank: 119) October 31, 1983.

[21] Acquired by Mobil (rank: 2) September 28, 1984.

[22] Acquired by American Standard (rank: 124) February 24, 1984.

[23] Acquired by Hanson Industries North America (rank: 201) May 7, 1984.

THE 500 BY INDUSTRY, RANKED BY 14 MEASURES

Industry Companies are identified in the main directory by industry code. See page 316 for key.	Sales	Assets	Net income	Sales change from '83	Profits change from '83	Stock-holders' equity	Number of em-ployees	Net income as percent of:		10-yr. earn-ings-per-share growth	Total return to investors:		Assets per empl.	Sales per empl.
								sales	stock-holders' equity		10-yr. avg.	1984		
AEROSPACE														
Avco	176	36	137	406	193	116	148	148	310	—	21	6	35	348
Boeing	39	33	19	472	39	32	30	96	49	19	26	26	160	175
Cessna Aircraft	380	313	449	38	—	311	324	449	445	390	248	379	220	336
Fairchild Industries	332	272	447	423	411	380	250	448	—	—	59	273	245	396
Gulfstream Aerospace	406	368	366	262	391	405	466	259	245	—	—	348	82	77
General Dynamics	44	101	51	248	148	134	20	222	9	26	33	71	473	344
Grumman	146	205	156	151	330	235	125	268	89	260	118	107	405	321
Lockheed	43	99	53	66	159	122	35	266	13	28	14	134	439	249
Martin Marietta	80	141	476	173	—	211	80	—	—	—	71	36	374	240
McDonnell Douglas	34	43	56	104	212	56	28	326	237	154	82	53	265	207
Northrop	106	158	112	180	74	194	88	239	31	38	41	45	401	293
Rockwell International	37	47	36	152	174	52	16	189	75	135	98	270	353	297
Rohr Industries	412	414	314	287	86	409	368	144	71	185	221	94	346	292
Signal Companies	61	51	65	450	26	45	61	228	329	324	107	193	150	202
Sundstrand	299	242	220	158	98	238	225	133	269	186	100	271	252	408
Textron	122	143	150	289	173	107	82	318	347	311	244	149	375	371
United Technologies	16	25	24	212	178	26	7	288	183	151	184	186	391	341
APPAREL														
Cluett Peabody	311	350	367	255	325	362	193	356	304	—	67	262	480	478
Gulf & Western Industries	77	72	68	466	—	77	57	184	227	226	219	258	250	318
Hartmarx	292	326	294	213	266	326	155	292	239	98	94	304	486	489
INTERCO	142	188	147	367	133	129	66	253	311	259	239	282	467	474
Kellwood	430	450	418	409	156	466	228	371	223	271	192	265	490	492
Levi Strauss	149	209	297	473	406	179	103	411	411	294	85	436	441	412
Manhattan Industries	491	487	426	246	91	476	405	362	173	11	69	438	455	366
Oxford Industries	438	481	378	203	274	457	237	254	54	205	18	445	494	488
Palm Beach	477	469	431	452	375	469	377	389	323	132	19	28	438	399
Phillips-Van Heusen	459	479	407	218	52	454	328	324	238	83	36	121	482	454
VF	278	288	139	333	307	274	121	34	21	46	74	300	485	493
Warnaco	434	444	392	183	374	422	279	313	289	146	172	422	466	472
BEVERAGES														
Anheuser-Busch	53	64	49	297	260	73	97	149	95	59	284	85	126	90
Brown-Forman Distillers	336	262	201	23	367	244	372	56	224	88	86	249	73	156
Coca-Cola	46	45	26	347	259	47	92	54	32	156	306	67	72	76
Coors (Adolph)	285	224	281	401	392	166	297	289	413	—	—	369	110	188
General Cinema	334	258	152	442	258	303	260	21	12	15	16	73	205	359
Heileman (G.) Brewing	277	352	278	407	360	350	381	290	138	23	27	448	204	73
MEI	369	383	285	105	243	397	428	152	48	17	7	169	180	121
Pabst Brewing	319	483	446	467	396	486	482	447	421	362	329	79	196	48
PepsiCo	40	57	87	321	370	76	11	370	295	242	261	99	463	467
Seagram (Joseph E.) & Sons	238	60	66	432	103	44	285	2	336	—	—	—	16	123
CHEMICALS														
Air Products & Chemicals	215	134	119	331	165	127	203	75	264	128	373	179	98	252
Allied	36	34	40	356	11	40	15	241	251	291	346	252	255	270
American Cyanamid	100	88	86	267	162	81	98	173	258	292	292	187	193	246
American Hoechst	312	223	259	281	99	202	312	344	369	—	—	—	84	66
Avery International	325	346	270	171	121	347	318	198	119	166	315	78	325	228
BASF Wyandotte	274	303	397	204	270	324	455	415	396	—	—	—	55	40
BOC	365	179	368	145	386	140	267	390	434	—	—	—	70	205
Badische	377	354	389	343	332	398	451	341	316	—	—	—	118	94
Big Three Industries	360	236	250	142	184	228	416	103	332	187	323	215	45	125

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								sales	stockholders' equity		10-yr. avg.	1984		
CF Industries	328	252	—	348	—	245	486	—	—	—	—	—	12	21
Cabot	214	171	171	187	93	195	355	177	246	107	53	141	39	51
Celanese	120	100	114	398	108	130	173	224	208	266	207	58	79	102
Dexter	409	402	355	210	283	404	403	227	204	145	146	314	240	214
Dow Chemical	25	21	27	369	64	23	69	205	292	320	411	341	40	52
Dow Corning	338	278	180	195	143	248	384	35	112	—	—	—	77	135
Du Pont (E.I.) de Nemours	7	11	11	412	176	11	9	286	290	219	355	217	68	53
Engelhard	150	281	274	102	381	259	379	402	335	—	—	403	94	28
Ethyl	223	196	130	458	185	191	270	87	115	239	141	34	93	107
FMC	119	130	313	462	405	152	144	425	423	363	139	40	189	166
Fuller (H.B.)	473	478	424	280	352	468	450	366	284	223	89	400	358	216
Ferro	394	437	409	314	348	413	344	367	349	330	300	391	415	324
GAF	370	390	249	363	—	387	456	92	23	254	235	11	124	69
Grace (W.R.)	50	54	94	288	191	61	37	348	352	321	332	285	286	315
Hercules	144	131	92	447	251	97	149	95	214	267	378	241	179	253
Insilco	354	314	342	132	334	348	338	270	275	232	129	175	208	266
Koppers	202	233	358	140	339	227	221	414	420	367	336	353	232	186
Liquid Air	461	330	365	263	244	357	454	182	330	—	—	209	83	168
Lubrizol	344	305	217	346	305	260	453	72	221	290	412	195	60	65
Mobay Chemical	229	231	202	107	49	220	396	229	266	—	—	—	47	47
Monsanto	51	38	44	330	280	33	67	122	279	306	321	339	107	147
Morton Thiokol	181	219	153	36	118	209	197	180	133	124	102	150	264	213
NL Industries	248	183	473	468	—	187	248	—	—	—	347	416	101	220
Nalco Chemical	392	375	199	425	292	305	441	25	43	159	268	327	154	134
National Distillers & Chemical	168	162	264	463	368	164	278	379	417	374	294	191	57	62
National Starch & Chemical	342	341	253	215	218	313	414	123	145	—	—	—	158	105
Olin	178	165	182	320	188	167	202	257	326	314	193	203	148	190
Pennwalt	297	277	279	308	319	250	295	255	348	305	281	205	182	219
Reichhold Chemicals	351	427	372	307	211	394	452	332	270	319	251	230	191	71
Rohm & Haas	179	185	108	274	183	150	263	61	113	210	296	159	88	86
SCM	185	234	295	284	69	240	178	391	366	288	156	63	355	275
Sherwin-Williams	177	254	223	352	219	287	188	335	167	221	270	147	371	218
Stauffer Chemical	235	152	377	191	—	148	266	410	436	380	365	396	59	154
Sun Chemical	335	329	376	128	30	419	337	350	226	41	90	253	256	223
Tyler	300	374	316	349	48	406	358	305	90	118	76	188	295	141
Union Carbide	35	23	57	341	13	24	21	325	393	359	409	440	140	259
ELECTRONICS, APPLIANCES														
AMP	205	195	90	101	189	158	156	31	40	75	238	329	324	376
Advanced Micro Devices	424	358	210	7	20	341	240	18	26	7	1	342	437	487
American Tel. & Tel.	8	5	12	493	—	5	4	276	345	381	343	154	138	286
Allegheny International	154	178	415	417	388	346	110	435	—	—	357	412	389	410
Bairnco	453	436	371	124	234	438	429	211	129	27	13	55	251	234
Champion Spark Plug	348	331	364	319	316	302	254	328	373	355	401	370	410	432
Cooper Industries	180	159	157	247	97	109	129	193	356	252	188	356	300	416
Diebold	469	423	247	329	232	338	411	22	65	50	83	287	269	306
E-Systems	346	406	235	435	271	336	262	97	46	24	15	387	454	409
Eaton	103	117	70	51	28	114	84	117	52	213	190	248	322	299
Emerson Electric	93	103	52	95	236	75	56	65	96	141	291	160	372	388
General Electric	9	10	6	368	257	8	5	70	107	147	236	226	230	313
General Instrument	327	285	327	470	400	210	154	287	402	228	80	457	462	494
Gould	230	203	402	477	402	170	187	424	438	384	330	414	234	345
Harvey Hubbell	472	440	293	265	166	361	426	48	160	168	135	88	280	287
Harris	182	177	192	138	107	178	127	280	333	165	121	419	352	424
Hoover	385	446	302	395	110	410	227	155	53	65	198	133	489	486
ITT	21	18	43	438	378	18	6	333	374	334	287	417	365	469

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								sales	stock-holders' equity		10-yr. avg.	1984		
Intel	226	150	91	18	68	99	153	19	210	42	48	432	215	437
Johnson Controls	243	257	219	299	255	264	174	231	211	21	47	336	404	415
Loral	498	408	334	15	179	379	407	76	196	10	11	164	246	378
Litton Industries	75	70	60	376	135	71	48	131	180	—	20	281	284	373
M/A-Com	363	298	312	94	167	281	280	216	350	80	38	250	261	385
Medtronic	496	386	245	324	282	310	424	10	118	31	370	431	192	332
Magic Chef	294	342	254	26	42	360	273	199	36	22	46	242	385	262
Maytag	401	447	230	302	309	375	436	42	22	160	267	291	279	144
McGraw-Edison	218	210	429	482	401	217	177	437	441	351	214	259	282	330
Midland-Ross	337	308	460	169	—	352	284	—	—	—	208	218	281	320
Motorola	67	71	50	55	85	59	19	113	139	95	312	398	426	470
National Semiconductor	225	235	226	29	—	214	87	298	322	184	218	393	483	491
National Service Industries	290	337	234	157	264	296	199	165	151	137	61	162	472	452
North American Philips	88	126	131	167	128	147	58	342	252	129	115	208	420	368
Oak Industries	490	—	—	399	—	—	—	—	—	—	403	462	—	—
Pittway	464	432	347	154	200	371	382	125	247	117	134	77	343	351
Penn Central	145	110	110	415	9	83	113	120	314	—	354	50	213	374
ROLM	397	299	315	40	299	236	311	168	383	—	—	—	207	379
Raychem	405	339	318	290	194	318	315	153	293	127	381	399	319	395
Raytheon	58	82	73	385	359	72	42	285	272	148	149	261	386	319
Sanders Associates	366	349	287	50	222	320	276	158	242	—	17	413	388	403
Scott & Fetzer	378	381	301	196	180	363	215	161	148	123	91	18	479	490
Scovill	345	360	321	223	140	359	201	243	212	257	122	17	477	485
Singer	148	198	222	408	47	258	68	365	248	—	341	171	474	479
Square D	247	251	159	103	72	234	165	91	83	202	260	194	414	448
Texas Instruments	63	86	59	64	—	90	31	178	58	121	388	345	436	419
Tracor	456	442	339	87	136	417	306	127	105	20	8	200	443	465
Varian Associates	317	300	241	82	145	280	220	126	231	61	64	424	413	461
Westinghouse Electric	30	30	32	300	204	31	13	196	218	6	136	238	249	333
Whirlpool	128	190	99	123	249	131	170	147	131	32	237	227	257	127
White Consolidated Industries	172	227	468	379	—	256	218	—	—	—	227	441	239	146
Zenith Electronics	220	274	228	60	126	272	133	306	216	85	353	451	468	455
FOOD														
American Bakeries	463	491	435	402	105	484	401	422	228	—	133	51	493	312
Amstar	258	328	307	268	63	444	351	343	16	—	—	—	221	93
Anderson Clayton	233	261	309	251	59	229	219	369	389	270	231	33	317	267
Archer Daniels Midland	74	120	146	163	296	82	319	376	380	216	262	214	32	15
Beatrice Foods	26	66	45	413	7	69	44	235	47	180	334	292	315	152
Borden	81	105	96	312	320	96	119	271	233	174	226	81	186	128
CPC International	87	113	95	270	116	102	95	246	209	236	285	146	275	199
Campbell Soup	107	142	98	224	229	106	76	195	194	209	288	93	381	331
Central Soya	200	355	387	328	351	322	419	423	381	339	362	118	165	36
ConAgra	121	218	231	22	157	286	186	399	185	—	10	59	290	91
Consolidated Foods	49	107	100	326	275	153	26	361	74	169	127	39	470	354
Dart & Kraft	33	55	42	428	304	49	43	234	121	172	276	23	243	143
Dean Foods	320	463	369	230	203	447	444	352	59	16	12	47	327	64
Federal Co.	259	434	298	139	81	378	271	334	104	208	68	102	461	182
Flowers Industries	414	467	385	148	237	449	293	310	126	125	30	38	484	450
Frederick & Herrud	391	490	445	453	382	488	474	444	390	255	—	—	424	54
General Foods	39	67	58	371	277	67	59	308	181	183	228	117	211	101
General Mills	64	106	78	419	337	112	36	274	88	136	314	211	452	398
Gerber Products	350	366	266	194	168	319	253	139	179	84	167	308	435	439
Gold Kist	227	382	—	219	—	453	327	—	—	—	—	—	361	70
Hanson Industries N.A.	201	208	272	494	—	358	109	364	98	—	—	—	429	476
Heinz (H.J.)	98	132	77	339	267	126	77	150	51	106	169	96	366	295

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Hershey Foods	190	239	154	226	289	203	224	162	152	86	66	43	238	165
Hormel (Geo. A.)	240	351	356	390	301	337	365	394	318	258	209	204	227	59
IC Industries	90	58	140	253	151	91	63	349	376	264	113	49	178	339
Idle Wild Foods	356	488	438	76	311	479	483	438	384	325	—	198	312	37
International Multifoods	293	385	344	461	342	384	352	338	199	192	243	350	328	136
Interstate Bakeries	383	485	396	384	—	480	265	358	14	—	225	91	491	463
Katy Industries	492	431	461	309	—	441	374	—	—	—	162	389	354	426
Kellogg	143	182	71	260	312	255	211	43	4	115	272	35	164	110
Land O'Lakes	161	306	—	490	—	382	404	—	—	—	—	—	117	26
Lipton (Thomas J.)	284	297	211	177	276	284	413	138	135	—	—	—	90	60
Mich. Milk Producers Assoc.	438	493	—	443	—	489	492	—	—	—	—	—	119	8
McCormick	353	340	255	332	131	364	353	115	35	68	324	148	259	231
Mid-America Dairymen	255	456	—	456	—	462	478	—	—	—	—	—	146	22
Monfort of Colorado	241	484	413	279	329	474	462	427	80	—	300	54	339	25
Nabisco Brands	54	79	61	264	335	89	45	217	67	101	145	29	357	283
Ocean Spray Cranberries	478	470	—	255	—	472	487	—	—	—	—	—	65	44
Pillsbury	94	118	111	176	192	136	38	279	161	140	176	41	464	473
Quaker Oats	118	168	121	73	32	196	138	275	94	111	138	24	308	183
Ralston Purina	72	153	74	397	338	144	71	221	30	134	277	27	431	247
Smithfield Foods	441	494	444	465	356	490	473	440	254	—	—	333	476	84
Savannah Foods & Industries	422	472	406	90	377	470	490	347	109	—	103	277	46	23
Shaklee	476	468	420	480	397	437	489	351	357	81	109	426	53	38
Staley (A.E.) Manufacturing	170	232	322	58	29	205	449	408	408	296	282	323	34	20
Sun-Diamond Growers	454	460	—	436	—	477	479	—	—	—	—	—	149	72
Swift Independent	135	449	425	127	389	455	360	442	343	—	—	352	418	24
Tyson Foods	364	455	399	74	78	473	281	375	44	—	6	1	478	392
United Brands	117	249	276	459	—	329	86	419	184	—	304	420	487	338
Universal Foods	493	475	423	481	384	459	480	355	328	235	154	272	177	100
Winn Enterprises	481	396	448	500	—	491	484	445	353	—	414	461	51	63
Wilson Foods	192	477	374	479	—	478	417	421	7	—	—	177	421	35
Wisconsin Dairies Cooperative	474	492	—	382	—	483	493	—	—	—	—	—	66	7
Wrigley (Wm. Jr.)	423	453	305	411	318	373	408	119	130	196	242	87	359	221
FURNITURE														
Leggett & Platt	489	480	391	79	146	463	373	226	84	57	52	260	453	429
Mohasco	372	425	404	216	139	383	258	374	365	162	299	178	471	462
GLASS, CONCRETE, ABRASIVES, GYPSUM														
Anchor Hocking	375	347	459	475	—	354	277	—	—	—	293	447	383	418
Brockway	309	362	436	136	3	386	255	434	429	368	316	144	432	353
CertainTeed	273	294	286	166	158	282	349	312	320	—	254	145	161	108
Corning Glass Works	216	163	166	271	284	133	146	159	341	253	338	197	273	435
Guardian Industries	444	353	303	161	306	377	420	99	123	49	25	116	163	248
Gifford-Hill	483	380	428	175	23	402	457	372	407	349	170	21	113	184
Lafarge	318	363	452	317	—	291	391	—	—	—	—	402	61	103
Libbey-Owens-Ford	213	243	213	14	65	241	164	282	250	198	212	80	402	355
Lone Star Industries	301	213	258	254	31	253	362	190	368	[illegible]	246	235	52	130
Manville	204	133	197	357	239	165	181	265	355	356	445	456	132	290
Moore McCormack Resources	447	256	394	67	75	290	463	315	414	344	245	236	33	117
National Gypsum	219	265	158	12	51	233	241	142	81	87	151	163	235	148
Norton	272	245	239	306	149	213	195	213	334	298	215	207	350	434
Owens-Corning Fiberglas	134	173	149	244	164	172	160	303	244	122	318	310	244	159
Owens-Illinois	112	96	125	392	53	94	74	296	339	263	297	127	272	361
PPG Industries	89	76	63	150	160	70	102	107	197	157	187	245	155	197
U.S. Gypsum	156	186	100	20	37	169	182	81	42	40	158	180	214	193

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								sales	stock-holders' equity		10-yr. avg.	1984		
INDUSTRIAL AND FARM EQUIPMENT														
Allis-Chalmers	233	—	—	400	—	—	—	—	—	—	430	464	—	—
Baker International	199	148	214	431	—	139	183	300	386	203	379	311	151	285
Black & Decker Manufacturing	232	197	175	39	40	201	161	140	234	250	417	306	303	417
Briggs & Stratton	389	405	332	259	278	345	317	201	262	293	368	255	397	357
Brunswick	239	271	177	93	114	263	189	129	60	78	81	75	394	363
Coleman	479	451	411	108	344	435	410	316	324	64	144	401	347	327
Cameron Iron Works	457	[illegible]	475	492	—	309	370	—	—	—	416	437	108	365
Caterpillar Tractor	52	[illegible]	483	91	—	43	52	—	—	—	424	427	152	215
Cincinnati Milacron	395	316	395	117	—	321	298	353	397	280	101	435	283	411
Clark Equipment	266	268	379	21	50	247	245	396	416	371	396	423	248	264
Colt Industries	194	236	129	112	147	308	167	110	8	262	84	220	412	317
Combustion Engineering	133	[illegible]	168	440	—	181	106	330	265	181	213	167	274	316
Cummins Engine	135	[illegible]	101	19	2	207	175	79	20	47	173	239	254	203
Deere	86	49	160	227	12	58	81	378	418	357	386	378	96	239
Dover	260	273	165	57	163	232	217	90	110	74	62	98	349	340
Dresser Industries	104	89	173	305	4	74	85	363	412	313	382	299	219	298
Eagle-Picher Industries	393	410	362	71	56	366	320	267	286	273	224	275	403	360
Emhart	208	246	181	327	293	239	134	210	140	142	128	161	447	444
Federal-Mogul	326	321	268	83	216	314	232	191	206	91	165	343	419	438
Figgie International Holdings	367	369	405	221	358	408	239	381	346	227	108	332	446	468
Fuqua Industries	339	359	317	133	346	427	294	249	37	34	23	84	373	307
Harris Graphics	475	439	410	80	14	487	448	319	6	—	—	—	216	226
Hughes Tool	271	166	472	355	—	151	247	—	—	—	425	428	85	274
Ingersoll-Rand	151	145	246	272	—	145	116	380	398	366	426	298	285	370
Joy Manufacturing	388	284	343	388	5	271	304	220	375	277	360	337	181	383
Outboard Marine	321	315	260	131	138	299	301	167	215	149	150	95	262	260
Rexnord	322	282	360	160	10	289	236	339	379	322	310	380	309	414
Roper	430	461	401	109	87	465	399	336	132	—	75	430	399	257
Smith International	365	259	467	310	—	269	331	—	—	—	419	455	129	296
Tecumseh Products	330	336	212	278	172	273	286	88	169	194	166	216	364	300
Teledyne	113	108	28	126	55	119	72	4	5	3	9	13	337	381
Timken	282	221	277	81	1	184	190	284	400	337	325	362	289	453
JEWELRY, SILVERWARE														
Jostens	486	464	335	186	213	426	361	94	72	44	44	65	445	447
MEASURING, SCIENTIFIC, PHOTOGRAPHIC EQUIPMENT														
Ametek	460	445	290	189	253	403	385	58	50	109	58	317	356	325
Bard (C.R.)	499	448	329	403	298	381	390	60	171	108	326	434	360	400
Bausch & Lomb	407	333	265	728	217	315	335	82	186	133	199	172	278	362
Becton Dickinson	286	238	229	426	61	216	204	171	317	247	400	135	305	440
Bell & Howell	374	367	341	354	361	396	283	236	168	309	159	126	392	404
EG&G	291	419	257	113	241	439	171	212	10	29	77	244	492	481
Eastman Kodak	28	22	15	370	79	15	14	52	259	285	406	237	194	309
Foxboro	455	379	440	455	387	334	289	430	443	375	301	338	408	477
General Signal	210	207	155	170	199	163	158	146	280	161	230	263	332	375
Lear Siegler	187	199	187	37	150	225	126	250	200	79	42	212	396	441
Minnesota Mining & Mfg.	45	44	20	257	228	30	29	40	64	206	369	231	263	294
Perkin-Elmer	275	248	221	135	154	231	222	174	287	143	309	315	287	358
Polaroid	263	215	373	414	390	160	238	395	430	327	392	358	156	271
Sybron	435	401	457	474	—	418	323	—	—	—	359	289	384	433
Tektronix	252	226	145	202	34	185	179	49	189	62	186	384	340	436
Xerox	38	27	64	335	383	27	17	331	399	353	432	368	174	305

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								sales	stock-holders' equity		10-yr. avg.	1984		
METAL MANUFACTURING														
Alumax	184	180	135	44	62	190	242	132	136	—	—	—	102	109
Aluminum Co. of America	62	40	69	261	102	35	89	242	371	301	307	361	67	133
Amsted Industries	408	361	382	56	—	298	346	299	394	295	183	82	297	342
Armco	82	80	480	266	—	143	78	—	—	—	437	460	203	237
Asarco	254	160	481	478	—	174	291	—	—	—	391	439	49	145
Bethlehem Steel	68	69	471	240	—	121	65	—	—	—	431	443	8	224
Carpenter Technology	448	335	338	35	44	323	433	135	305	240	142	386	134	217
Copperweld	484	428	439	31	—	434	475	428	428	386	328	444	111	116
Cyclops	262	345	398	75	—	407	313	418	340	336	234	123	331	126
Handy & Harman	411	392	419	304	144	443	402	385	313	307	229	269	229	222
Inland Steel	116	119	462	296	—	123	145	—	—	—	427	393	162	162
Interlake	314	312	323	190	82	317	307	294	300	328	250	153	226	229
Kaiser Aluminum & Chemical	114	84	465	85	—	118	216	—	—	—	303	390	43	56
LTV	48	35	482	10	—	98	55	—	—	—	429	454	125	173
Lukens	500	452	437	88	—	451	464	426	425	372	405	364	197	189
Marmon Group	222	247	206	162	70	288	208	261	162	—	—	—	333	265
NVF	257	—	—	46	—	—	—	—	—	—	375	458	—	—
National Intergroup	159	189	261	487	—	162	481	384	419	382	413	373	6	6
Newmont Mining	362	147	300	318	366	92	363	188	431	378	349	411	30	210
Northwest Industries	242	192	196	489	—	223	151	183	255	373	131	189	336	471
Nucor	396	372	282	86	83	327	458	118	202	96	37	394	105	82
Phelps Dodge	306	174	479	430	—	175	354	—	—	—	442	453	41	158
Revere Copper & Brass	415	421	451	115	—	485	445	—	—	—	394	240	202	151
Reynolds Metals	105	77	123	206	—	100	135	309	325	318	298	347	99	153
Stanadyne	471	454	337	62	92	414	432	108	108	188	178	110	323	269
Weirton Steel	289	371	237	499	—	481	348	170	1	—	—	—	316	140
Wheeling-Pittsburgh Steel	296	—	—	32	—	—	—	—	—	—	441	459	—	—
Worthington Industries	427	433	359	52	111	420	435	218	165	173	29	365	233	181
METAL PRODUCTS														
American Can	124	114	124	464	132	135	150	260	312	329	317	115	157	171
Ball	295	324	275	146	209	332	314	247	176	90	72	12	266	179
Butler Manufacturing	494	473	443	92	—	442	468	433	440	385	337	155	241	164
CBI Industries	310	216	308	144	349	226	233	281	391	286	435	325	167	407
Ceco	425	466	430	65	350	440	330	407	383	326	283	363	469	406
Chromalloy American	303	311	453	441	—	349	235	—	—	—	393	335	376	391
Crane	352	384	349	484	—	390	350	291	207	342	266	57	334	245
Crown Cork & Seal	246	289	244	344	233	252	252	251	282	218	345	72	306	212
Easco	431	457	456	143	—	464	409	—	—	—	222	383	368	230
Gillette	160	151	115	359	281	183	122	114	66	249	302	69	298	386
Harsco	287	286	271	41	66	277	264	256	302	241	125	173	267	277
Hoover Universal	341	356	320	276	252	389	334	252	128	119	99	284	314	243
Household Manufacturing	333	304	345	217	100	285	261	311	363	—	—	—	338	372
Illinois Tool Works	420	370	240	106	198	293	343	39	170	189	269	176	330	382
Masco	299	220	148	457	285	186	345	27	195	103	264	359	62	160
Nortek	458	398	408	11	35	448	442	329	253	97	88	305	173	209
National Can	188	279	288	141	54	297	268	387	299	261	247	103	222	92
Parker Hannifin	256	275	208	61	33	243	168	181	240	234	155	307	430	458
Robertson (H.H.)	419	417	427	294	379	431	347	400	387	281	106	344	382	369
Snap-on Tools	442	404	243	110	122	330	400	32	68	66	271	105	258	284
Stanley Works	280	301	204	121	130	270	231	136	158	144	132	246	379	337
Wyman-Gordon	495	391	328	225	369	312	467	66	307	104	—	366	106	170

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								sales	stockholders' equity		10-yr. avg.	1984		
MINING, CRUDE-OIL PRODUCTION														
AMAX	153	75	478	361	—	84	246	—	—	—	434	421	28	74
Freeport-McMoRan	343	161	178	311	323	199	438	30	243	317	280	354	21	81
Inspiration Resources	329	194	470	111	—	221	398	—	—	—	444	463	36	106
Int'l Minerals & Chemical	231	156	190	338	315	137	308	192	367	338	363	302	42	85
Louisiana Land & Exploration	249	191	176	298	317	219	491	109	163	315	366	90	1	1
Mitchell Energy	315	155	203	454	345	242	469	89	230	36	55	429	8	45
NERCO	470	292	256	172	141	343	485	24	78	—	—	—	25	57
North American Coal	467	260	370	129	169	446	476	179	62	52	279	221	27	98
Occidental Petroleum	18	20	29	483	324	42	91	307	298	347	263	62	29	29
Standard Oil (Ohio)	24	16	10	424	327	14	79	17	116	45	290	229	22	46
Vulcan Materials	305	287	195	97	106	246	369	83	187	182	120	174	92	97
Westmoreland Coal	418	412	464	291	—	425	470	—	—	—	428	397	122	79
MOTOR VEHICLES AND EQUIPMENT														
American Motors	91	164	414	116	—	340	157	443	439	389	433	450	228	83
Arvin Industries	355	438	352	45	76	393	251	297	213	54	124	42	481	446
Borg-Warner	99	109	89	232	256	86	33	194	261	114	95	320	459	482
Chrysler	14	31	5	16	19	36	18	20	2	—	223	89	183	67
Dana	109	138	97	70	71	113	105	187	177	197	160	232	318	256
Echlin	381	378	284	84	113	355	321	134	142	155	342	152	363	343
Ex-Cell-O	283	296	248	100	245	265	226	215	268	179	110	228	380	367
Ford Motor	4	8	4	119	88	13	3	176	17	30	256	132	253	142
Fruehauf	138	176	186	42	6	224	147	340	201	116	255	405	307	227
General Motors	2	2	3	188	197	3	1	186	97	77	233	113	268	198
International Harvester	79	92	466	34	—	494	123	—	—	—	443	418	145	104
PACCAR	163	255	138	8	24	200	302	175	103	55	117	381	142	50
Sealed Power	462	443	299	120	115	369	415	68	124	48	56	219	313	282
Sheller-Globe	349	393	330	33	43	401	259	263	134	215	87	251	450	413
Smith (A.O.)	323	407	463	293	—	432	296	—	—	—	241	408	425	276
TRW	59	85	67	236	161	79	25	248	193	207	163	279	444	431
MUSICAL INSTRUMENTS, TOYS, SPORTING GOODS														
AMF	288	267	416	184	—	267	196	420	427	376	358	288	378	460
Coleco Industries	361	418	469	47	—	492	395	—	—	—	45	446	291	150
Hasbro Bradley	373	316	262	1	18	335	366	102	111	2	3	3	168	241
Hillenbrand Industries	465	416	311	197	291	372	397	86	154	120	116	355	288	328
Kidde	157	181	194	434	—	206	120	323	281	230	112	283	367	390
Mattel	334	357	209	491	73	450	210	78	3	—	—	2	475	480
OFFICE EQUIPMENT (INCLUDES COMPUTERS)														
AM International	417	388	218	336	8	493	290	29	—	1	438	372	416	456
Amdahl	357	276	325	429	363	279	364	232	358	—	—	406	103	201
Apple Computer	234	291	225	9	354	262	418	269	241	—	—	76	74	43
Burroughs	76	65	72	200	187	57	49	207	308	284	436	92	271	377
Computervision	436	343	296	27	220	353	378	98	174	8	4	357	206	311
Control Data	71	26	348	249	407	78	60	436	442	13	175	382	58	278
Data General	279	244	189	25	16	218	206	106	232	58	148	7	326	422
Datapoint	416	323	361	222	17	304	332	230	364	150	57	407	237	394
Digital Equipment	65	50	55	43	227	29	32	154	359	72	189	8	292	427
Hewlett-Packard	60	56	23	53	90	34	34	33	91	37	252	374	310	380
Honeywell	56	61	76	322	310	55	24	295	331	178	140	224	377	428
IBM	6	3	1	164	202	2	2	8	28	113	274	183	139	187
Management Assistance	487	476	455	497	—	475	383	—	—	—	—	9	440	397
NCR	97	83	54	264	206	65	50	62	150	105	123	360	344	421

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								sales	stockholders' equity		10-yr. avg.	1984		
Nashua	421	474	393	362	195	456	425	327	164	272	367	120	393	195
Pitney Bowes	217	187	122	345	84	198	140	84	70	110	119	129	345	445
Prime Computer	400	363	263	72	80	316	359	73	166	—	2	201	277	301
Sperry	69	52	85	381	57	46	41	277	370	300	384	295	231	393
Storage Technology	340	—	—	460	—	—	—	—	—	—	404	466	—	—
Tandem Computers	445	364	289	59	120	294	423	80	296	—	—	452	166	242
Wang Laboratories	165	139	88	24	123	108	142	44	141	4	5	410	210	346
PAPER, FIBER, AND WOOD PRODUCTS														
Bemis	358	415	400	220	96	421	342	382	321	297	182	25	390	263
Boise Cascade	102	87	215	231	235	95	143	404	415	348	211	256	112	138
Champion International	70	37	454	96	—	53	54	—	—	—	331	385	131	304
Consolidated Papers	382	338	191	98	77	283	434	23	82	102	43	16	136	132
Crown Zellerbach	129	125	184	159	326	117	191	357	378	361	376	267	95	96
Dennison Manufacturing	384	413	331	277	269	376	341	208	192	190	73	206	387	314
Esselte Business Systems	413	365	354	229	153	368	305	219	263	—	—	—	362	420
Federal Paper Board	403	327	319	198	25	400	446	157	106	243	153	273	91	129
Fort Howard Paper	250	222	128	5	186	173	234	41	172	53	93	140	175	261
Georgia Kraft	443	320	350	365	336	306	471	169	354	—	—	—	50	95
Georgia-Pacific	47	59	144	238	250	68	93	409	410	358	377	185	120	78
Great Northern Nekoosa	194	157	142	99	112	146	243	130	278	276	206	301	69	120
Hammermill Paper	198	241	251	165	67	266	257	346	294	312	180	181	190	113
International Paper	80	48	141	286	395	37	118	368	426	377	371	266	56	119
Jefferson Smurfit	387	441	381	495	—	460	375	314	45	—	—	388	370	233
James River Corp. of Virginia	158	200	169	28	60	261	176	264	63	18	39	367	270	206
Kimberly-Clark	108	98	81	234	205	88	108	141	219	200	195	156	184	236
Longview Fibre	466	373	384	49	171	395	472	238	306	388	335	351	71	115
Louisiana-Pacific	269	217	292	205	95	189	244	322	404	340	265	297	153	273
Mead	141	144	120	372	22	149	212	206	217	289	179	312	100	99
Pentair	440	459	390	4	58	458	439	293	114	224	—	199	335	196
Potlatch	302	237	267	252	190	230	333	214	372	332	327	376	89	177
Scott Paper	137	90	102	147	94	87	213	121	288	233	273	119	48	89
Sonoco Products	368	411	291	235	177	356	287	164	156	126	79	296	434	389
Southwest Forest Industries	359	302	442	156	—	411	387	439	—	—	257	196	130	161
Stone Container	267	253	336	2	—	333	310	359	297	268	60	377	135	137
Temple-Inland	264	212	162	498	—	182	299	74	257	—	—	101	81	149
Tyco Laboratories	398	420	353	174	117	415	356	237	157	63	111	56	369	302
Union Camp	183	123	105	130	129	104	207	47	229	244	278	324	76	200
Westvaco	211	170	133	114	46	155	229	101	236	245	191	243	127	180
Weyerhaeuser	66	46	80	168	273	38	100	278	382	343	420	318	64	118
Willamette Industries	276	269	236	181	27	276	339	203	235	274	258	233	133	122
PETROLEUM REFINING														
Agway	96	211	—	275	—	331	194	—	—	—	—	—	236	55
Amerada Hess	41	39	109	439	355	50	316	393	392	333	253	340	4	5
American Petrofina	173	175	280	387	357	204	465	392	388	365	289	104	14	13
Ashland Oil	42	74	474	353	—	171	114	—	—	—	286	321	123	49
Atlantic Richfield	12	13	30	445	398	12	94	383	403	316	350	151	10	11
Chevron	11	7	9	446	333	4	101	166	319	275	240	257	2	9
Coastal	55	91	164	366	287	222	421	412	137	256	157	276	7	4
Crown Central Petroleum	221	348	450	416	409	412	394	450	446	—	308	442	188	42
Diamond Shamrock	83	53	75	211	—	48	249	185	351	350	348	247	19	33
Exxon	1	1	2	391	265	1	10	145	85	231	220	31	20	12
Farmers' Union Cent'l Exch.	237	309	—	342	—	325	477	—	—	—	—	—	38	19
Kerr-McGee	111	78	224	422	385	80	300	403	424	360	439	280	23	30
Mapco	175	169	136	410	36	188	392	151	149	237	422	131	31	34

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								sales	stock-holders' equity		10-yr. avg.	1984		
Mobil	3	4	13	389	353	6	8	386	342	302	216	202	37	39
Murphy Oil	167	112	174	476	372	141	388	244	338	265	201	303	18	32
Nat'l Coop. Refinery Assoc.	371	395	—	471	—	436	494	—	—	—	—	—	3	2
Pennzoil	147	94	132	241	362	154	322	204	291	331	205	20	24	41
Phillips Petroleum	17	17	18	404	261	16	132	197	274	229	340	22	9	16
Quaker State Oil Refining	319	332	403	396	394	344	440	398	395	352	383	158	121	68
Shell Oil	13	12	8	350	288	10	112	53	225	191	174	15	5	14
Standard Oil (Indiana)	10	9	7	451	223	9	62	77	125	214	295	143	15	18
Sun	20	19	31	444	208	21	104	304	327	303	275	138	26	27
Tenneco	19	15	25	383	347	17	22	262	344	323	344	234	54	112
Texaco	5	6	62	118	404	7	46	432	437	383	319	190	11	10
Tosco	189	310	477	488	—	430	488	—	—	—	446	465	17	3
Unocal	27	24	21	301	262	20	180	124	271	246	232	74	13	17
U.S. Steel	15	14	37	282	—	19	27	360	362	369	397	328	44	61
Walter (Jim)	162	111	172	207	125	177	192	258	285	278	361	114	78	176
Witco Chemical	236	295	232	292	201	295	329	272	147	220	171	222	187	80
PHARMACEUTICALS														
Abbott Laboratories	131	97	48	334	230	85	115	15	27	39	152	274	171	280
American Home Products	78	102	22	437	286	64	73	9	11	139	372	166	302	244
Baxter Travenol Laboratories	207	154	357	449	408	128	124	413	433	345	407	449	299	464
Bristol-Myers	92	93	41	316	231	63	107	28	39	100	217	37	185	191
Johnson & Johnson	57	63	33	393	302	41	40	63	120	152	408	309	321	326
Lilly (Eli)	130	31	39	394	294	60	137	5	38	177	423	83	104	211
Merck	110	62	38	250	279	51	111	11	79	201	398	165	97	238
Miles Laboratories	281	264	363	380	365	251	256	377	405	—	—	—	218	279
Pfizer	101	73	34	386	248	54	96	13	61	130	320	66	147	250
Rorer Group	450	387	283	242	308	370	393	57	93	310	333	349	225	303
Richardson-Vicks	261	270	205	155	119	257	272	172	203	283	311	157	199	185
Robins (A.H.)	404	—	484	193	—	—	—	—	—	—	389	293	—	—
Schering-Plough	193	127	106	377	341	103	159	45	249	279	440	213	143	347
Searle (G.D.)	266	184	113	68	295	168	288	14	92	212	204	10	63	169
SmithKline Beckman	136	95	35	469	313	66	128	3	29	43	202	254	144	258
Squibb	191	146	93	325	246	101	162	36	205	238	364	70	172	329
Sterling Drug	196	201	117	448	303	157	166	93	182	251	399	137	294	322
Upjohn	166	140	107	245	290	125	163	85	191	199	395	61	159	268
Warner-Lambert	126	104	83	405	263	93	90	111	178	287	385	64	260	352
PUBLISHING, PRINTING														
American Greetings	347	317	242	178	142	300	209	104	155	131	96	86	442	484
Capital Cities Communications	313	225	126	77	215	192	325	7	101	33	49	112	86	208
Deluxe Check Printers	386	394	183	239	242	328	275	16	18	14	197	14	433	443
Donnelley (R.R.) & Sons	203	206	127	125	221	180	205	100	144	70	181	30	209	235
Dow Jones	308	290	134	208	254	249	369	12	25	51	50	346	128	131
Gannett	186	167	82	153	224	124	139	26	76	89	203	60	304	402
Harcourt Brace Jovanovich	376	344	333	243	182	388	336	223	159	204	114	4	296	308
Knight-Ridder Newspapers	224	214	118	182	214	159	172	59	190	92	105	124	320	364
Macmillan	446	400	340	78	152	423	376	137	86	138	32	5	293	334
McGraw-Hill	245	228	116	285	247	197	230	37	56	69	34	184	217	272
Media General	439	334	304	295	268	342	367	105	220	73	104	100	212	350
Meredith	482	397	310	427	207	374	431	55	143	67	22	46	195	288
New York Times	270	280	167	185	175	254	340	71	57	82	40	19	141	111
Time Inc.	132	116	84	486	170	138	200	112	55	170	78	334	75	88
Times Mirror	139	124	79	201	225	105	130	64	102	93	92	136	200	281
Tribune	209	172	161	179	101	176	198	163	267	—	—	109	170	255
Washington Post	304	319	185	192	181	292	422	51	33	25	28	139	116	75

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RUBBER, PLASTIC PRODUCTS														
Armstrong Rubber	390	426	375	199	134	392	412	302	277	60	130	125	276	172
Carlisle	449	458	346	54	109	416	427	143	117	76	35	48	351	232
Cooper Tire & Rubber	437	462	380	89	240	433	437	245	188	—	31	130	342	192
Dayco	331	377	412	63	15	428	292	405	337	282	352	313	400	289
Dorsey	452	486	432	134	364	482	386	416	260	158	126	409	458	310
Firestone Tire & Rubber	95	121	163	303	343	110	53	373	360	335	380	375	423	401
GenCorp	140	149	433	69	410	161	141	446	444	387	185	294	242	251
Goodrich (B.F.)	115	115	238	315	21	132	136	406	406	341	313	286	176	178
Goodyear Tire & Rubber	31	42	47	351	137	39	12	283	256	248	305	316	407	356
Lancaster Colony	497	465	421	496	—	461	380	337	283	193	63	319	427	425
Rubbermaid	432	430	273	48	155	367	447	67	77	35	164	106	201	157
Uniroyal	164	202	198	283	238	193	184	321	309	299	351	371	247	204
SHIPBUILDING, RAILROAD AND TRANSPORTATION EQUIPMENT														
American Standard	123	137	170	17	89	156	70	345	315	222	70	210	409	430
Coachmen Industries	451	489	417	273	380	471	461	354	153	9	24	425	449	124
Fleetwood Enterprises	244	429	227	6	41	385	269	240	19	5	161	223	465	163
Mack Trucks	174	229	200	3	—	215	223	317	276	—	—	433	224	139
Ogden	171	240	306	209	371	301	75	401	303	346	196	108	488	483
Todd Shipyards	410	422	388	485	373	445	326	320	146	12	97	192	417	387
SOAPS														
Avon Products	127	129	104	360	272	120	99	160	175	308	418	268	301	323
Chesebrough-Pond's	197	204	143	237	340	212	152	128	87	211	356	264	348	384
Clorox	307	307	193	323	196	278	406	69	100	112	168	122	114	87
Colgate-Palmolive	73	122	207	418	399	111	83	417	401	364	402	68	329	194
Economics Laboratory	379	403	324	358	—	391	371	200	127	195	410	326	311	225
Int'l Flavors & Fragrances	468	389	216	378	321	307	459	6	73	217	415	170	115	155
Lever Brothers	206	322	434	149	393	351	430	441	432	—	—	—	109	31
Procter & Gamble	22	32	16	374	314	22	51	116	122	164	390	182	80	58
Revlon	152	135	151	421	322	142	131	233	301	269	387	142	223	335
TEXTILES, VINYL FLOORING														
Armstrong World Industries	228	266	179	269	104	208	185	156	222	175	374	44	398	349
Burlington Industries	125	136	233	337	376	115	64	397	409	354	339	392	422	451
Collins & Aikman	316	376	269	30	45	365	282	202	69	99	51	168	411	291
Fieldcrest Mills	429	435	441	373	403	424	274	431	435	167	147	322	460	475
Lowenstein (M.)	402	424	351	258	124	399	303	225	198	94	137	128	428	405
Riegel Textile	488	471	458	375	—	452	357	—	—	—	210	415	457	459
Shaw Industries	480	482	383	13	38	467	443	209	34	171	54	330	406	254
Springs Industries	312	325	326	340	331	275	214	301	361	176	194	331	448	466
Stevens (J.P.)	169	230	386	214	226	237	117	429	422	370	322	290	451	423
United Merchants & Mfrs.	433	399	422	122	—	429	309	388	377	379	421	52	395	442
West Point-Pepperell	251	293	252	233	297	268	169	273	273	225	177	404	456	449
TOBACCO														
American Brands	84	68	46	420	300	62	39	46	99	163	143	111	341	457
Philip Morris	32	28	17	313	328	28	47	50	41	71	259	97	87	114
Reynolds (R.J.) Industries	23	29	14	433	127	25	23	38	24	153	249	32	169	167
United States Tobacco	485	409	188	137	210	339	460	1	15	56	65	225	137	174

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All companies on the list must have derived more than 50% of their sales from manufacturing and/or mining. Sales include rental and other revenues but exclude dividends, interest, and other non-operating revenues. Sales of subsidiaries are included if they are consolidated. Sales from discontinued operations are included if these figures are published. If the sales are at least 10% higher for this reason, there is a symbol (¶) next to the sales figure. All figures are for the year ending December 31, 1984, unless otherwise noted. Sales figures do not include excise taxes collected by the manufacturer, and so the figures for some corporations—most of which sell gasoline, liquor, or tobacco—may be lower than those published by the corporations themselves. If they are at least 5% lower for this reason, there is an asterisk (*) next to the sales figures.

ASSETS

Assets are those shown at the company's fiscal year-end.

NET INCOME

Net income is shown after taxes and after extraordinary credits or charges if any are shown on the income statement. A double asterisk (**) signifies an extraordinary credit reflecting at least 10% of the net income shown, a double dagger (‡) an extraordinary charge of at least 10%. Figures in parentheses indicate a loss.

STOCKHOLDERS' EQUITY

Stockholders' equity is the sum of capital stock, surplus, and retained earnings at the company's year-end. Redeemable preferred stock is excluded if its redemption is either mandatory or outside the control of the company, except in the case of cooperatives. For purposes of calculating "net income as percent of stockholders' equity," any dividends paid on redeemable preferred stock, if that stock's redemption is either mandatory or outside the control of the company, have been subtracted from the net income figure.

EMPLOYEES

The figure shown is a year-end total except when it is followed by a dagger (†), in which case it is an average for the year.

EARNINGS PER SHARE

For all companies the figures shown are the primary earnings per share that appear on the company's income statement. These figures are based on a weighted average of the number of common shares and common stock equivalents outstanding during the year. Per-share earnings for 1983 and 1984 are adjusted for stock splits and stock dividends. They are not restated for mergers, acquisitions, or accounting changes made after 1974. A double asterisk (**) signifies an extraordinary credit reflecting at least 10% of the net income shown, a double dagger (‡) an extraordinary charge of at least 10%. Results are listed as not available (N.A.) if the companies are cooperatives, joint ventures, or wholly owned subsidiaries of other companies, or if the figures were not published in 1974. The growth rate is the average annual growth, compounded. No growth rate is given if the company had a loss in either 1974 or 1984.

TOTAL RETURN TO INVESTORS

Total return to investors includes both price appreciation and dividend yield to an investor in the company's stock. The figures shown assume sales at the end of 1984 of stock owned at the end of 1974 and 1983. It has been assumed that any proceeds from cash dividends, the sale of rights and warrant offerings, and stock received in spinoffs were reinvested at the end of the year in which they were received. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur; however, no effort has been made to reflect the cost of brokerage commissions or of taxes. Results are listed as not available (N.A.) if shares are not publicly traded or are traded on only a limited basis. If companies have more than one class of shares outstanding, only the more widely held and actively traded has been considered.

Total return percentages shown are the returns received by the hypothetical investor described above. The ten-year figures are annual averages, compounded. If corporations were substantially reorganized—e.g., because of mergers—the predecessor companies used in calculating total return are the same as those cited in the footnotes to the earnings-per-share figures.

INDUSTRY CODE

Industry code numbers used in the directory indicate which industry represents the greatest volume of industrial sales for each company. The numbers refer to the industry groups below, which are based on categories established by the U.S. Office of Management and Budget and issued by the Federal Statistical Policy and Standards Office. They are the same industry groups as those shown in the tables beginning on page 294. The median figures in the tables refer only to results of companies in the 500; no attempt has been made to calculate medians in groups with fewer than four companies.

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Most of the figures in this FORTUNE 500 Directory were prepared by Susan Caminiti and Nancy E. Marx, who are responsible for the columns reporting on companies' sales, assets, net income, stockholders' equity, and the industry code numbers. Figures on earnings per share and total return to investors were prepared by Claudine Knight.

MAY 13, 1985

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MAY 13, 1985 VOL. 111, NO. 10

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EYEING THE LETTERS

Letters of credit, that is. Regulators are looking hard at these off-balance-sheet items.

FEDERAL BANKING regulators are fretting about the spectacular growth of something called standby letters of credit. Since 1980 the letters, by which a bank guarantees a customer's debt to a third party, have tripled in volume to become a $147-billion-a-year business. Big players like Citicorp may earn more than $100 million annually in fees from them. But regulators worry because the letters do not appear on the bank's balance sheet. That means the risks inherent in them are not backed by federally prescribed levels of capital, as loan risks are.

Standby letters of credit are a modern twist on trade agreements pioneered by Phoenician merchants more than three milleniums ago. With the traditional variety, a buyer pays his bank the full cost of a shipment of goods, and the bank issues a letter of credit to the seller, holds the buyer's money in escrow until the goods are delivered, and then pays the seller. By contrast the purchaser of a typical standby letter of credit is a borrower who pays the bank only a small fee—usually less than 1% of the letter's face value per year—in return for the bank's promise to pay if the purchaser defaults on the obligation covered by the letter.

Standby letters took off in the volatile economic climate of the early 1980s as a means of assuaging jittery investors. Major purchasers include municipalities issuing new types of tax-exempt bonds and companies floating commercial paper, the volume of which has exploded. In effect, the purchaser borrows the bank's high credit rating so it can sell the bond or paper at, say, 13.5% interest instead of the 15% it would otherwise have to settle for on the basis of its own creditworthiness.

In a speech last month, H. Joe Selby, a senior deputy to the Comptroller of the Currency, suggested that banks with extensive off-balance-sheet risks—letters of credit being his prime example—should be subject to even tougher capital requirements than the stringent ones that went into effect April 15. The question is whether formal regulation is needed. One possibility: lumping letters of credit with assets in computing the capital requirement, but—in recognition that they are less risky than a normal portfolio of loans—at only half their value.

Many bankers expect some such regulation by next year. Predictably, some don't like the prospect. They say the letters are safe, pointing out that there have been no major losses on them. Nevertheless, according to several people in the business, the banks may already be scaling back. "From here on, I think you'll see banks growing their letters of credit more in proportion to the general growth of their loans," says Carleton R. Haswell, a senior vice president at Chemical Bank. Even if that happens, banks' exposure will remain substantial. Many letters have been issued that guarantee payment for up to ten years—plenty of time for another recession to work its mischief.

— John Paul Newport Jr.

BANK	TOTAL 1984 VOLUME in millions	INCREASE FROM 1983	AS PERCENT OF STOCKHOLDERS' EQUITY
Citicorp	$19,946	15.5%	310
Manufacturers Hanover Trust	$12,031	22.8%	462
BankAmerica	$11,293	11.4%	221
Chemical	$9,943	22.4%	391
Bankers Trust	$9,000	15.4%	469

The Rise in Standby Letters of Credit

Five banks accounted for more than a third of all standby letters of credit outstanding last year. These off-the-balance-sheet obligations far outstripped shareholders' equity in the institutions.

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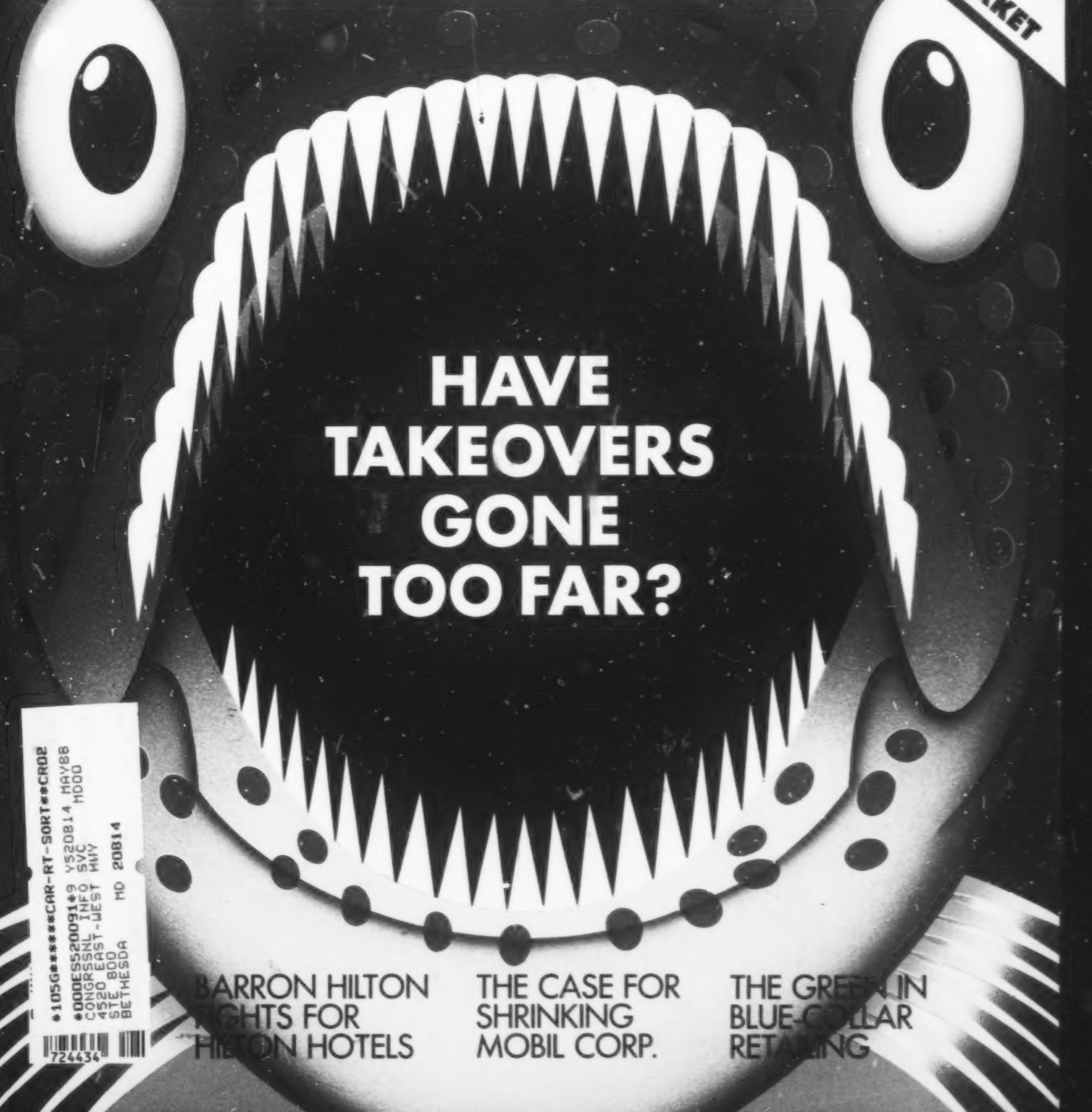
THE BABY BUST HITS THE JOB MARKET



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BARRON HILTON
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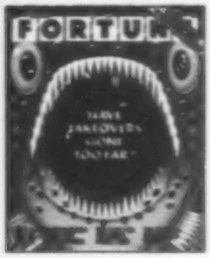

In Nicholas Gaetano's cover painting, corporate predation is fiercer than ever. See page 20.

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HAVE TAKEOVERS GONE TOO FAR?

Even giant corporations feel vulnerable to raiders these days, and a lot of managements would feel more comfortable if the government would raise new bars to unfriendly acquisitions. But intervention would be bad for stockholders and the economy.

■ *by Aloysius Ehrbar*

HOSTILE TAKEOVERS, always a subject of high contention, have become one of the hottest issues in Washington, on Wall Street, and in boardrooms across the U.S. Corporate chieftains, lawyers, investment bankers, Senators, and Congressmen are crying out more loudly than ever about the rapacity of professional raiders. Their complaints: Takeover mania wastes scarce investment capital. It inhibits innovation and threatens the competitiveness of U.S. industry by forcing managers to sacrifice long-term growth for transitory, short-term profits. The raiders dismember venerable corporations, destroying jobs and disrupting communities. And they saddle surviving companies with dangerously high leverage.

Have hostile takeovers gone too far? In five words, yes and no—mostly no. There have been excesses on both sides of the corporate barricades as takeover activity heated up over the past 18 months or so. But while the excesses are deplorable, they are probably self-correcting. The takeover explosion as a whole, on the other hand, has much to be said for it. Disinflation, deregulation, more sensible antitrust enforcement, and the virtual collapse of OPEC have left companies and whole industries in need of restructuring. In many cases assets and strategies that were right for the late 1970s are inappropriate for the mid-1980s. While raiders may intend only to enrich themselves, in some instances they also accelerate needed change by bidding for control of corporations whose managers are adjusting too slowly to the new environment. And the competition for corporate control pushes all managers to exploit their assets more efficiently.

Certainly both raiders and managers of target companies have gone to extremes in trying to tilt the odds in their favor. One unseemly tactic is greenmail, wherein a raider accepts a payoff from a target company, in the form of an above-market price for his shares, in return for walking away. Managers of target companies pay greenmail with company funds—that is, with money that other shareholders would prefer to see used differently. Another weapon not necessarily to the liking of every shareholder is the poison pill, a dastardly device that makes hostile takeovers deathly expensive.

Though they shouldn't exist, neither greenmail nor poison pills seem so grievous as to require intervention by Congress. Managers are learning that paying greenmail to one raider often attracts another. Outraged institutional investors are voting against poison-pill proposals in proxy statements and raiders are challenging them in the courts. Some investment bankers predict that neither will be important in the takeover game much longer.

The constant threat of a hostile tender offer provides managers with plenty of incentive to want raiders put out of business. Sympathetic legislators have introduced a blizzard of bills aimed at taming the takeover menace. Republican Pete Domenici, chairman of the Senate Budget Committee, proposed a temporary ban on takeovers financed with junk bonds—debt securities that are unrated or rated lower than Ba by Moody's and BBB by Standard & Poor's, and that pay interest rates three to five percentage points higher than investment-grade bonds because they are higher risk. Domenici's bill would affect only hostile acquisitions; it would still permit the use of junk bonds in leveraged buyouts and acquisitions that have the blessing of the acquired company's directors. Democrat Peter Rodino, chairman of the House Judiciary Committee, introduced a bill that would require disclosure of the social ramifications of takeovers—a sort of environmental impact statement for raiders. Senator William Proxmire advocates new rules that would all but eliminate acquisitions that aren't endorsed by the target company's directors; he calls his plan the Corporate Productivity Act of 1985.

Meanwhile, the raiders snap at their prey like a school of bluefish in a feeding frenzy. T. Boone Pickens, his checking account fat with pelf from forays against Gulf Oil and Phillips Petroleum, is mounting an assault on Unocal, the nation's 13th-largest oil company. Carl Icahn, scarcely pausing to digest *his* profits from tormenting Phillips (Icahn took a bite after Pickens was done), is making a hostile run at Uniroyal. Anglo-French financier Sir James Goldsmith, fresh from lucrative raids on St. Regis Paper and the Continental Group, is battling for Crown Zellerbach while simultaneously amassing shares in Colgate-Palmolive. And "Terrible" Ted Turner, the "Mouth of the South," is making an audacious no-cash offer for CBS, a company he once called "a cheap whorehouse."

THE NEW WORRIES about raiders stem from dramatic changes in the takeover game. The raiders in the biggest takeovers used to be chief executives of large corporations, such as Harry Gray of United Technologies, who stalked targets that they wanted to fold into their operations. But the raiders in the largest and most dramatic recent battles have been financial opportunists like Pickens, Icahn, and Goldsmith. Their companies, often just paper vehicles set up to mount takeovers, usu-

RESEARCH ASSOCIATE *Lorraine Carson*

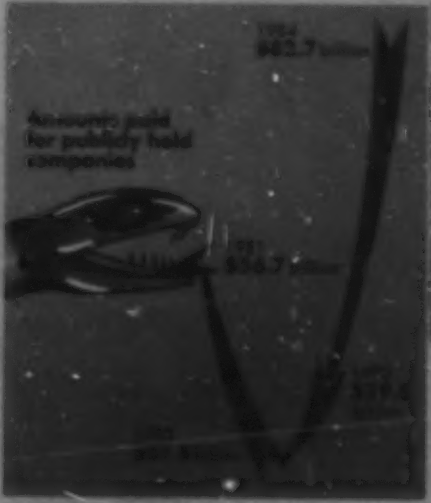
ally are puny compared with the targets. These raiders are rarely after companies they want to own. They may want to keep part of a target, but they're mostly interested in selling off pieces for more than the values they command in the stock market. Which means that they might spring on any company they believe is undervalued.

Today's raiders owe much of their muscle to Drexel Burnham Lambert, the investment banking firm that devised the junk bond financing method they use to raise funds for tender offers. Michael Milken, 39, a brilliant trader who led Drexel to dominance of the junk bond market during the 1970s, pioneered the original issuance of high-yield securities. Hardly any companies issued junk bonds 15 years ago; most of the ones on the market had been issued as investment-grade securities by blue-chip companies that had fallen on hard times. Last year corporations issued $14 billion of junk bonds, $10.3 billion of them through Drexel. Only about 10% of Drexel's issues went for leveraged buyouts and takeovers, both hostile and friendly. At the end of 1981 Drexel began selling junk bonds to finance leveraged buyouts. From there it was a simple step to using them to bankroll hostile takeovers as well (FORTUNE, September 3, 1984).

Junk bond takeover financing makes the largest companies vulnerable to the puniest raiders. It also is a cheap source of financing because Drexel doesn't actually raise the money backing up the tender offers. Instead, it lines up commitments from institutional investors to buy the bonds if the tender offer succeeds. The institutions promise to put up the money in return for commitment fees that range from 0.35% to 0.70% of the amount they pledge, or $35,000 to $70,000 for a $10-million commitment.

Boone Pickens was the first to use junk bonds in a takeover attempt when he went after Gulf Oil in 1983. Ever since, financial speculators have scurried to Drexel. Milken arranged junk bond commitments for Goldsmith's tender offer for the Continental Group last year. Icahn relied on Drexel-generated commitments to give credibility to his $4-billion offer for 51% of Phillips. Pickens has commitments of $3 billion arranged through Drexel behind his offer for Unocal.

Drexel's actions have bolstered the impression that the takeover process can't possibly produce anything good for the economy. The investment bankers at Drexel search out companies that could be carved up for more than their stock market values, and then look for a raider to make the move. For instance, Drexel thought Phillips was still vulnerable after it bought out Pickens, and sold Icahn on making his bid. That ambulance-chasing approach to investment banking isn't new. Investment banker Felix Rohatyn, an archcritic of the current scene, has been proposing takeovers to clients for decades. But Drexel's fee in the Icahn-Phillips deal was somewhat unusual; it got 20% of Icahn's profits. That seemed to make Drexel as much a partner as an adviser to Icahn. That's not how white-shoe investment bankers used to behave.



Have Junk, Will Travel

Corporate raiders retrenched during the stock market rally of 1982 and 1983, but junk bond financing set them in motion in 1984.

Though they're hired by the board of directors on behalf of the shareholders, the investment bankers who defend corporations against takeovers don't always seem to represent the shareholders' interests. The directors of Phillips agreed to pay their investment bankers, Morgan Stanley and First Boston, up to $35 million if they defeated Boone Pickens but only $6 million if they lost. In the Pickens-Unocal contest, Morgan Stanley and Dillon Read will split $25 million in fees if Unocal remains independent. If the company is acquired by anyone, at any price, they'll get $[illegible] million less. Payments like these give the investment bankers considerable incentive to help managers keep their jobs while distancing the bankers' interests from those of the shareholders.

Takeover critics maintain that this "junk bond takeover binge," as Nicholas J. Brady, the chairman of Dillon Read, calls it, is leading to the overleveraging of America. The warnings about excessive leverage sound persuasive: many junk bond takeover bids would result in companies with just a whisper of equity and a roar of debt. And plenty of sensible people have worried about the inherent risk in recent leveraged buyouts. Preston Martin, vice chairman of the Federal Reserve, says that he is "especially concerned about financial risks involved with leveraging and with acquisition activity financed with large amounts of debt."

Leveraged buyouts, however, aren't what the antitakeover folks are trying to halt. Nor has much been heard about the leverage taken on to finance friendly acquisitions. The calls for action apply only to junk bonds used in hostile takeovers. But not one junk-bond-backed takeover bid last year ended with the bonds actually being issued—Coastal States raised $300 million through Drexel to help finance its $2.2-billion acquisition of ANR. Every other junk bond takeover target either paid greenmail, driving the raider away, or was acquired by another bidder.

Many managers complain that the threat of hostile tender offers pressures them to prop up short-term earnings to raise their stock price and make the company unattractive to raiders. Says William C. Norris, chief executive of Control Data: "As companies strive to avoid becoming targets—to push share prices continually upward—management attention is riveted to short-term results." They could hype short-term earnings by cutting back on capital investment and research and development. But there is little convincing evidence that fear of takeovers has in fact caused large numbers of companies to slight future growth for the sake of short-run profits.

A high stock price plainly is the best defense against a takeover. Raiders only want companies whose stocks sell at deep discounts to the value of the underlying assets. But managers who scrimp on capital spending and R&D in order to boost short-run earnings are likely to push their stock price down, not up. The notion that the way to lift your stock price is to pump up short-term profits by skipping attractive long-term investments assumes that the market systematically undervalues future earnings. Or, as Joseph R. Perella, co-director of mergers and acquisitions at the investment bank of First Boston, puts it: "The whole short-run argument is based on the supposition that you maximize your share price by maximizing quarterly earnings. Where is that written?"

The best available evidence suggests that the stock market pays pretty close attention

Battling big oil, *John Sorte of Drexel Burnham Lambert meets with his oil and gas group to plot strategy in Boone Pickens's raid on Unocal.*

to actions that affect future earnings. For instance, shifting inventory accounting from first in, first out to last in, first out depresses current earnings but also reduces taxes and increases long-run earnings. If investors took only the short-run view, stock prices should drop when companies shift to LIFO. But studies found that stock prices don't drop; if anything, they rise.

THE STOCK MARKET apparently takes a long-run view of capital expenditures and investments in R&D too. While these may reduce short-run profits, the market likes them. Economists at the SEC measured the market's reaction to 62 announcements of new R&D projects from 1973 to 1983. On average, the stocks of the companies involved rose 1.8% (adjusted for movements in the overall market) in the four weeks after the announcements.

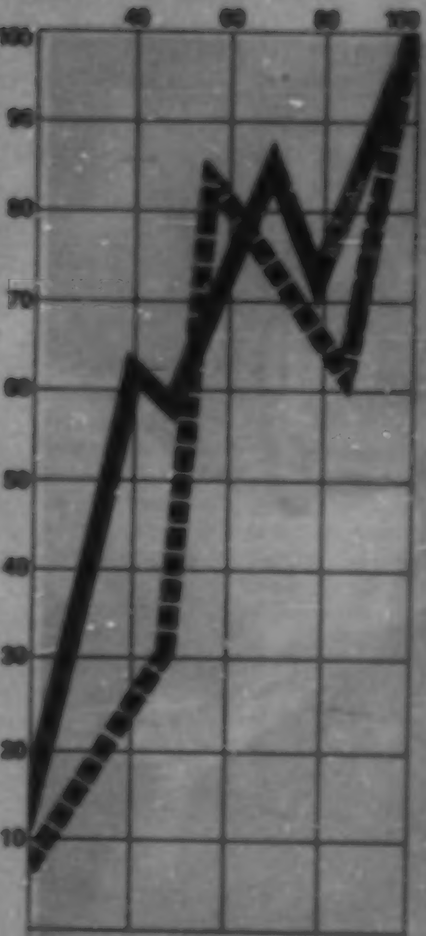
Two financial economists, John J. McConnell of Purdue University and Chris J. Muscarella of Southern Methodist University, made a similar study of the response to changes in capital budgets from 1975 through 1981. They found that stock prices rose when companies announced increases in capital budgets and dropped when companies cut their capital budgets.

Investors also seem smart enough to judge the wisdom of the investments. A major exception in McConnell's and Muscarella's findings involved oil companies. Their stocks dropped when they announced increased outlays for exploration and development and rose when investment was cut back. Michael C. Jensen, a finance professor at the University of Rochester, says that result supports his theory of why oil stocks have been selling at large discounts to their underlying values. The industry has had surplus capacity ever since the embargo in 1974, Jensen says, yet most major oil companies have been wasting money on too much exploration and too many refineries. He argues that the best long-term course for the companies is to postpone exploration until capacity declines.

That may explain why the stock market reacted so favorably to Arco's April 29 announcement that it was selling 1,147 gasoline stations in the Northeast, selling a refinery in Philadelphia, and cutting its exploration budget from $3.6 billion to $2.8 billion (see Corporate Performance). Arco said the moves would require a $1.3-billion write-off this year, and yet its stock jumped 18% in five days. Brady of Dillon Read says Arco is sacrificing its long-run interests to keep raiders away. Jensen voices the polar view that fear of raiders helped persuade Arco to take the course that should be most profitable in the long run.

Another charge leveled against takeovers is that they soak up scarce credit that ought to be used for productive investments. But the money that raiders or other acquirers pay for companies goes to shareholders, few of whom, it seems safe to assume, tuck it under their mattresses. The only money that moves out of the savings pool is what individual shareholders spend on consumption, and even that stimulates the economy and ultimately leads to investment.

Critics also worry about dismembering corporations. Nicholas Brady states the case this way: "Busting up corporations for the sake of a few extra dollars for shareholders is a very short-term view. We ought to be a little careful in allowing a system that dis-



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A junk bond pioneer, Michael Milken of Drexel Burnham set up today's tender offers.

dismembers corporations." That complaint is based on the belief that corporations are responsible not only to shareholders but also to many other "stakeholders," including employees, suppliers, and customers.

But busting up a company does not destroy its assets; it simply moves the assets to managers who think they can use them more productively and therefore are willing to pay a higher price for them. Acquirers have no monopoly on busting up companies; many corporations sell subsidiaries to other companies or spin off divisions in leveraged buyouts. In either case, the managers may be right or wrong. But the actions are often interpreted differently, depending on who is doing the dismembering. When, say, ITT sells off acquisitions that didn't work out, it tends to get applauded for making sensible divestitures. When a raider sells a division of a target he has taken over, he usually gets damned for busting up the company.

Takeovers can be wrenching for the constituencies left behind, especially the employees. But there is little evidence that hostile acquirers treat employees, suppliers, or customers any worse than the old managers did or friendly acquirers would. After all, whoever ends up operating the company ought to have as much incentive as his predecessor to keep employees sufficiently happy to run a good business. Few executives would argue that Congress should block all mergers, acquisitions, and sales of factories or divisions; they recognize that the transfer of assets is essential in a dynamic economy.

The special danger in the current phase of the takeover game is that Congress might enact legislation that impedes hostile tender offers. Perella of First Boston says: "Congressmen don't understand the takeover game. But they have to get reelected and they need campaign contributions, and they understand that game very well." The test for judging takeovers should be whether both raiders and existing management treat shareholders fairly. A free, fluid market for corporate control is an essential ingredient of a sound economy. Any additional limits on takeovers would simply lock up assets in inefficient uses and do exactly what the anti-takeover forces say they fear—frustrate innovation, reduce competitiveness, and lead to a lower standard of living. ■

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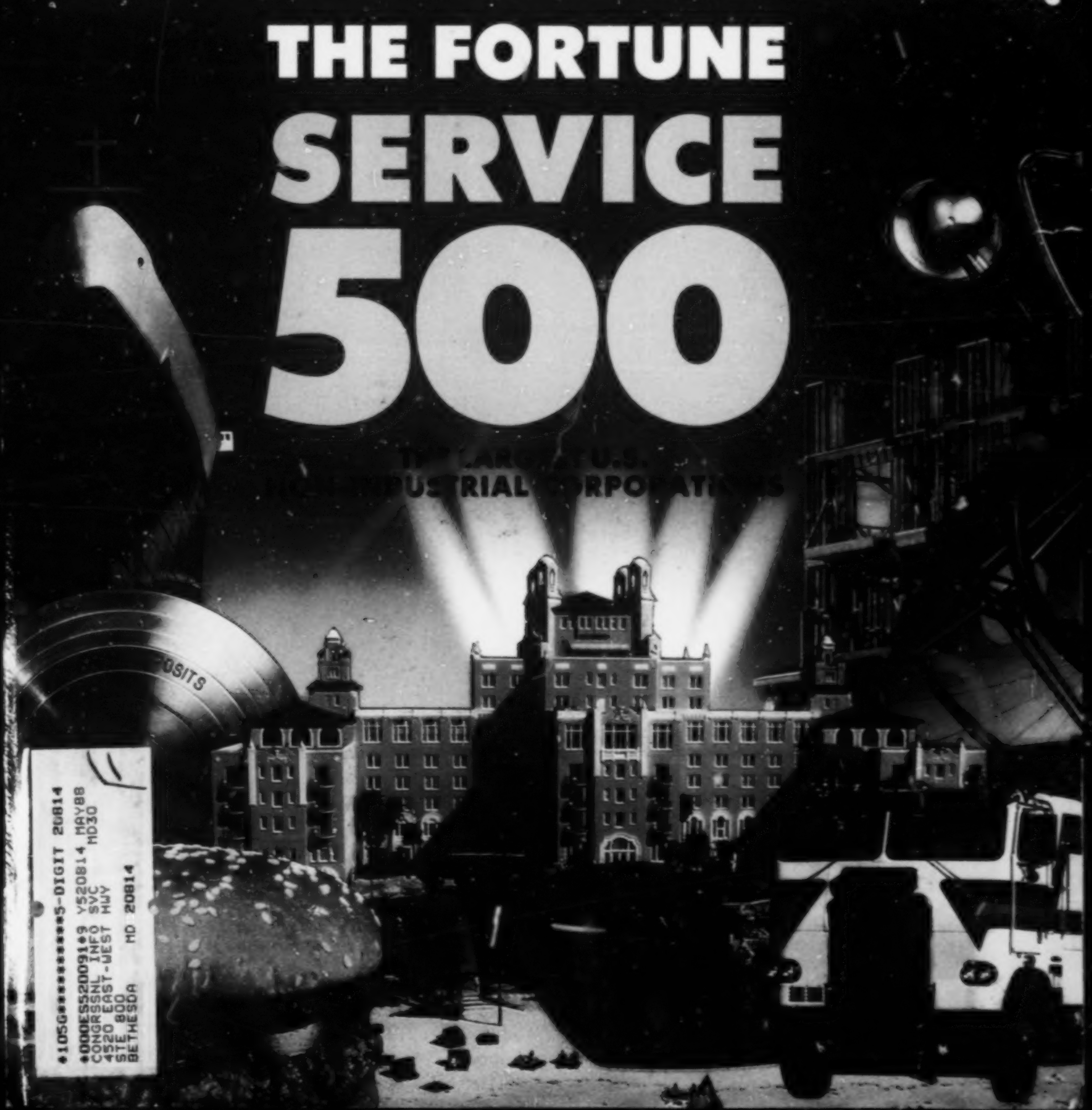
ARE SERVICE JOBS GOOD JOBS?

THE FORTUNE SERVICE 500

THE LARGEST U.S. NONINDUSTRIAL CORPORATIONS



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Technology

FORTUNE
THE FORTUNE
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500

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ARE SERVICE JOBS GOOD JOBS?

The shift to services is changing the type of work many Americans do, but it's not—as some charge—demolishing the middle class. Abetted by a capital-spending boom, it is generating lots of jobs that are better than yesterday's manufacturing jobs.

■ *by Richard I. Kirkland Jr.*

IS THE EXPLOSIVE growth of service industries condemning increasing numbers of Americans to low-wage lives? To many economists, journalists, business and labor leaders, and politicians, the answer is yes. The manufacturing jobs that have historically provided the bulwark of the middle class are vanishing, they argue; the service jobs created in their stead mainly employ hamburger flippers, sales clerks, and janitors. "A serious mismatch has developed between the jobs being lost and those being created in our society," claims the AFL-CIO in a pamphlet titled *Deindustrialization and the Two-Tier Society*. "The once solid middle tier of American jobs has been undermined." Big labor's broadside bears the imprimatur of several politically potent groups, including the NAACP, the National Organization for Women, and such unlikely allies of Smokestack America as the Sierra Club.

If the AFL-CIO is right, the U.S. is headed for long-run trouble: incomes will decline, the economy will generate less wealth, business will lose important markets, and living standards will fall. But a close look at what has been happening to employment and earnings patterns—and what is likely to happen—suggests that the fear of deindustrialization is considerably exaggerated.

The shift to services is indeed changing the type of work done by many Americans. But while it may be kicking some people down from the middle class—which is by no means clear from the sketchy data available—it's not kicking many. It may even be lifting most Americans into more lucrative lines of work. One reason for optimism is an enormous—and largely unremarked—boom in capital spending in the service sector. That promises to raise the productivity of service jobs and, along with it, their pay. At the least, the evidence suggests that white-collar jobs paying average or above-average wages are growing fast enough to keep the middle tier solid.

As used here, "services" conforms to the industry definitions favored by the Bureau of Labor Statistics (BLS) in Washington. BLS divides the economy into a goods-producing sector—farming, mining, construction, and manufacturing—and a service-producing sector that includes literally everything else. (Other authoritative sources, including FORTUNE's Service 500 directory in this issue, list construction as a service activity.)

Complaints about service jobs start with the observation that on average they pay far less than manufacturing jobs. In 1984 nonsupervisory service workers earned $250 a week, while production workers in manufacturing brought home $373. But while the gap is real, the official data overstate it. Service sector earnings are dragged down by a disproportionate number of part-time workers (most of whom are part-timers by choice). More than 20% of service workers toil under 30 hours a week—BLS's definition of part time—vs. less than 5% of the manufacturing work force.

If service jobs didn't provide plenty of Americans with the good life, U.S. living standards would have fallen long ago. Service-producing industries claimed more than half of all jobs over 30 years ago; today the figure is about 70% of the more than 107 million workers in the U.S. Those jobs are powerful producers of wealth: some 17 million service jobs outside government paid $326 a week or more last year, the median for full-time workers. That's roughly equal to the *total* number of manufacturing jobs. The growth of service jobs, in fact, is largely a sign of American affluence. Productivity gains in farming and manufacturing, which created more goods with less labor, have freed workers to provide services that a poorer society could not afford—more education, more health care, more financial services, more travel, more professional sports, more eating out. Business's quest for greater efficiency and quality has encouraged contracting out of services once supplied in-house—everything from menial tasks like cleaning and maintenance to top-notch legal and public relations advice or the latest in computer and communications services.

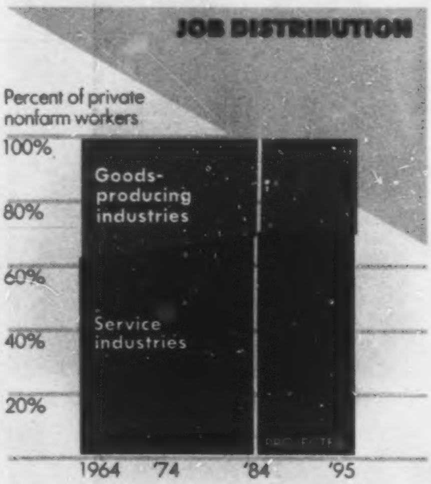
How, then, to account for the impression that the shift to a service economy is undermining America's ability to generate wealth? In the 1970s the composition of employment underwent great and rapid change. Before then, the postwar growth in service jobs had chiefly come at the expense of agriculture—where average wages are far below either services or manufacturing. But beginning about 15 years ago, job growth in manufacturing slowed markedly. During the recession years from 1979 to 1982, manufacturing went into a free fall.

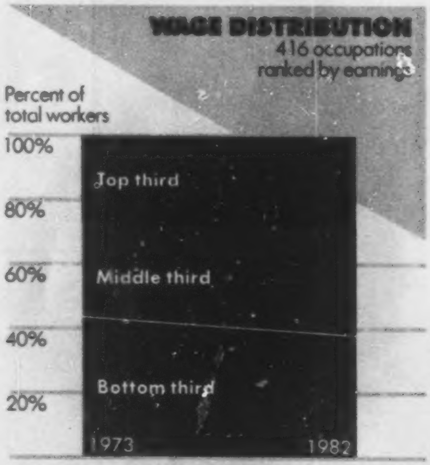
Services have been the engine, chassis, and body of the great American job machine, providing nearly 95% of the 25 million net new jobs created since 1969. More than half these jobs were in industries where the average annual wage was under $13,000 a year in 1980—medical services, eating and drinking places, retailing, business services, and the like. The ominous overtones of that trend seemed confirmed in 1982, when the Census Bureau reported that the number of families with middle-class incomes—$15,000 to $35,000 a year in 1982 dollars—had fallen 10% in 1979. Many people concluded that service industry growth was beginning to po-

RESEARCH ASSOCIATE *Ann Goodman*

larize America's work force by creating high-paying jobs for a relatively small number of professionals and executives and many more low-paying jobs for the great mass of workers (FORTUNE, November 28, 1983).

But the incredible shrinking middle class turned out to be mostly mythic. The sharp drop in households with middle-class incomes was mainly a statistical fluke caused by a Census Bureau effort to improve its measurement of family income distribution. Frank Levy, an economist at the University of Maryland, and Richard Michel, an economist with the Urban Institute, ran the government data through a computer and found that the distribution of family incomes had remained remarkably stable.





The Service Route to Higher Earnings

The long climb of service employment (top chart) may well be lifting incomes. Calculations by Neal Rosenthal of the Bureau of Labor Statistics (bottom chart) show that workers moved out of the worst-paid jobs and into occupations ranked in the top and middle thirds of all jobs by income. Weekly earnings in 1982 averaged $462 in top jobs and $328 in middle jobs.

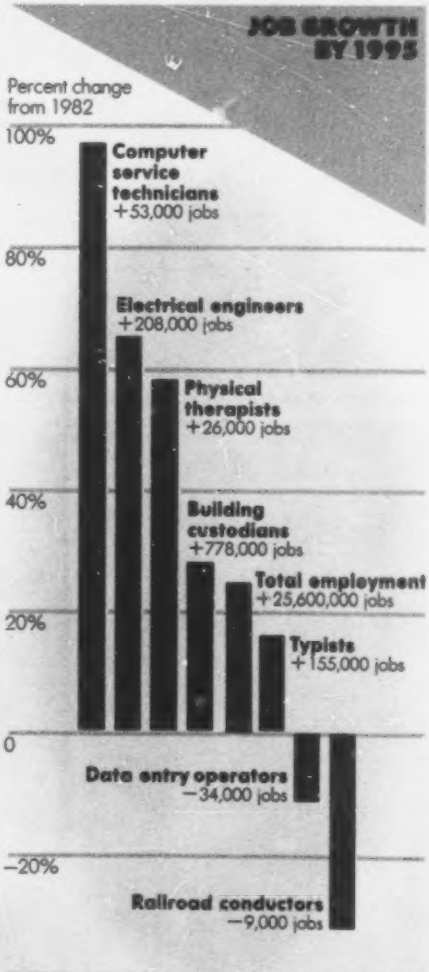
Levy and Michel's work still leaves a lot of questions unanswered. Some of the stability in family incomes, for example, reflects the rise in two-income households. If more people have to work to earn the same amount of money, that's hardly progress. And a recent study by Robert Z. Lawrence, an economist at the Brookings Institution, suggests that if individuals, not families, are considered, the middle of the job market has indeed been compressed. Using median male weekly earnings of full-time workers as a benchmark, Lawrence found that the proportion of middle-class jobs—by his definition they ranged from $13,000 to $25,950 a year in 1983—fell from 50% in 1969 to 46% in 1983. The bad news is that most of the shift reflected growth at the bottom.

But it's hard to finger service work as the culprit. Although the proportion of service workers in the middle class dropped during those years by three percentage points to 42%, Lawrence found even more dramatic evidence of a decline in middle-class manufacturing jobs. They fell from 55% of all manufacturing jobs to 48%.

The most compelling explanation for the sag in middle incomes lies in demographics. Since 1970 the number of 25-to-34-year-old workers in the U.S. has exploded from 17 million to more than 30 million. In tandem with a big influx of older working wives, this huge supply of baby-boomers had a generally damping effect on wages—and particularly on the wages paid young workers. Lawrence found that workers under 35 accounted for almost all the expansion of lower-class incomes since 1969. Among those over 35, there was a modest but general movement up the income ladder.

Lawrence's survey did confirm one complaint voiced by the antiservice set: the service category that has grown most rapidly over the past 15 years is inordinately freighted with low-paying jobs. BLS inelegantly calls this category "other services"; it lumps together everything from health, education, and business and professional services to advertising, repair shops, and beauty parlors. Some 41% of these employees earned under $13,000 in 1983. Only 29% of manufacturing workers earned that little. Credit the relative paucity of poorly paid manufacturing jobs mainly to unions, which claim more than 25% of the work force and have not only driven up wage rates for their own members but also set standards for others in the same industries. In the service sector, unions cover less than 10% of the work force outside government and haven't had as much influence on other workers' wages.

The good news is that the fastest growth within that category was in the better-paying jobs. Despite demography's depressing effect, and counter to the general downward drift in incomes from 1969 through 1983, Lawrence found a slight decrease in the num-



Where the Future Jobs Are—and Aren't

Building custodians, as the Bureau of Labor Statistics calls janitors, will claim the biggest number of new jobs, according to the BLS, followed closely by cashiers, secretaries, and office clerks. But most of these occupations won't increase their share of total employment. The big percentage gainers are high-paying jobs in technical and computer-related fields.

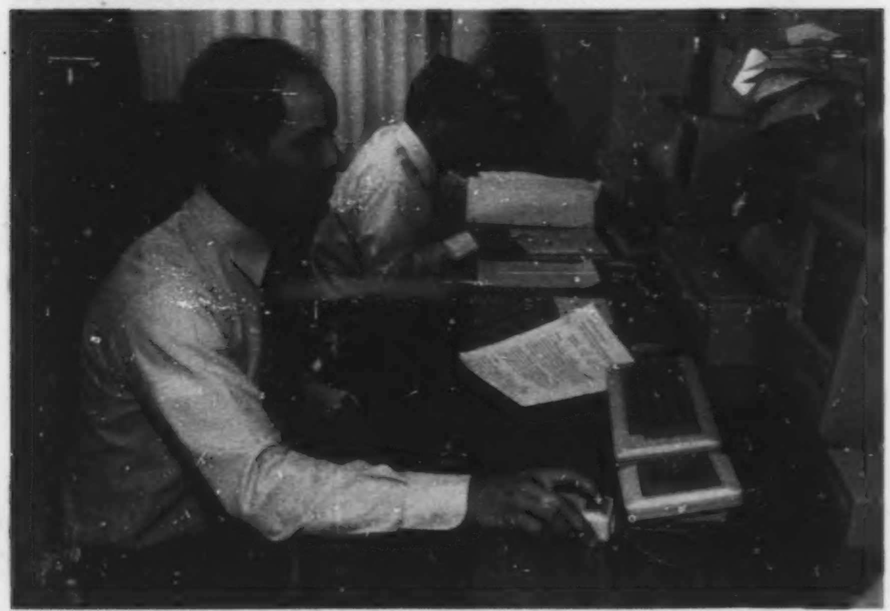
ber of low-paid "other service" workers and some gain in the middle and upper tiers.

That trend is even more vivid in a breakdown of the economy according to what people do rather than where they work. Drawing on the Census Bureau's monthly survey of 60,000 households, the BLS keeps tabs on changes in occupation. For nearly three decades the fastest-growing occupation category has been "professional, technical, and related work," which pays well above average.

Most of these high-paying jobs—they include accountants, lawyers, engineers, doctors, and scientists—are in service industries, but manufacturing has been claiming an increasing proportion. At General Motors, for example, the manufacturing sector's biggest employer, only the professional and technical occupations have greatly increased their share of employment through the auto industry's ups and downs over the past decade. Indeed, Ronald Kutscher, the man in charge of employment projections at BLS, estimates that, overall, roughly half the one million new "manufacturing jobs" created between 1969 and 1979 were white-collar service jobs in manufacturing companies.

Though not conclusive, the general picture painted by the occupational numbers suggests an economy where white-collar jobs that pay average or above-average wages are growing fast enough to offset the decline in decent blue-collar jobs and the rise in more menial service work. Recently Neal Rosenthal, chief of the division of occupational outlook at BLS, confirmed that broad-brush impression with a detailed examination of 416 occupations tallied by the Census Bureau. Rosenthal divided occupations into three tiers by income, based on 1982 earnings, and then compared the number of workers employed in those fields in 1982 with the number in 1973. During the 1970s the share of the work force employed in the lowest-paying tier of occupations dropped two percentage points. The top third rose nearly three points, and the middle shrank by less than one point. When Rosenthal took changing pay within occupations into account, he found significant growth in the percentages in the upper tier, some growth in the middle, and a big drop in the lowest-paying fields (see chart).

High-tech waitress: *a computerized keyboard transmits orders in Palo Alto, California.*


High-tech accountants: *gray display screens replace green eyeshades at Peat Marwick.*

STUDIES LIKE THOSE of Lawrence and Rosenthal have inspired second thoughts among some people who rushed to the judgment that a growing service sector meant a shrinking middle class. Barry Bluestone, an economist at Boston College, is perhaps the most prominent; he now describes himself as "agnostic," saying, "I still believe it's potentially a major problem, but the jury is still out."

If Kutscher's crew at BLS is right—and their projections have proved pretty accurate in the past—the jury should have less cause for hand-wringing over the fate of the middle class when it returns in five or ten years. For one thing, the big chill is largely over for blue-collar workers: the government's latest forecast of the employment outlook sees a big slowdown in the decline of manufacturing's share of employment through 1995. And employment in the relatively low-wage "other services" category should grow less frantically.

Those who worry that service jobs are bad jobs are right when they point out that, according to BLS projections, the greatest number of new jobs between now and 1995 will be for janitors, cashiers, waiters and waitresses, and others at the low-tech, low-pay end of the spectrum. But these are the categories that already account for huge chunks of the service sector, and the *rate* of growth for most will be no greater than the overall rate of employment growth. The fastest-growing occupations, by contrast, will be predominantly high-paying, high-tech service jobs, such as computer service technician, systems analyst, electrical engineer, and office machine repairer. According to

Rosenthal, the result is likely to be that workers will continue to move gradually out of jobs with lower-than-average wages—predominantly in blue-collar occupations—and into white-collar fields with higher-than-average earnings.

The computer boom will play a big role in this shift. Job growth in computer and data-processing services, where weekly wages average over $400, has far outstripped BLS's past projections and is being revised upward in the new forecast. With a base of only 362,000 employees—one-tenth the eating and drinking industry's—the computer and data-processing services business has added 193,000 new jobs since May 1981, making it a top contributor to total employment gains.

Computers are also reshaping service jobs and enhancing their value. Despite the myth that they are all labor-intensive businesses, service industries have been far and away the biggest buyers of the new information technology. The service sector purchased more than 80% of the $25 billion of computers, office equipment, and communications equipment shipped in 1982, the latest year for which figures are available. Since the recovery began, equipment spending, particularly for computers, has surged at twice the normal rate for postwar recoveries. By separating the components of capital spending into "high-tech investment" (computers, communications, instruments, measuring and control devices) and "basic industrial investment" (heavy machinery and factory equipment), Morgan Stanley economist Stephen Roach has made a dramatic discovery: after rising sharply since the mid-1960s, the capital stock per worker in the service sector recently surpassed that of manufacturing. "The sources of vitality in the economy are shifting," says Roach. "The service work force is now as richly endowed with capital as the typical production worker on the factory assembly line."

SIGNS OF the growing capital intensity of services abound. According to the *Nilson Report*, a newsletter for the electronic banking industry, installations of automated teller machines have jumped fivefold since 1979 to almost 50,000. William McGowan, chairman of MCI, the Washington-based telecommunications company, says that half his company's rapidly expanding work force now toil at their own computerized work stations. Peat Marwick Mitchell & Co., a Big Eight accounting firm, recently developed a tailor-made package of software and bought 4,000 Macintosh personal computers for its 7,000 professionals.

In the past, big companies in finance, insurance, and transportation were the heaviest users of computers. But with the advent of the personal computer, Nobel Prize-winning economist Wassily Leontief and his associate, Faye Duchin, predict that small firms with large information requirements—in industries like retailing, real estate, the hotel business, and educational services—will show the biggest rate of growth in computer use.

All this capital isn't likely to boost short-run wages for checkout clerks in grocery stores with optical scanners or janitors with high-tech vacuum cleaners. But a few service workers may see some immediate benefits. A computerized keypad developed by Validec, a Silicon Valley start-up, sends a waiter's orders directly to the bar or kitchen via radio waves (see previous page). Robert L. Chambers, Validec's vice chairman, claims that his test system in a demi-posh Palo Alto eatery increases table turnover, which means more tips. And in general, new technologies should contribute to productivity and efficiency, raising the nation's total wealth-producing ability and the resources for increasing the rewards of workers.

The investment boom in services should also tend to lift average wages by eliminating poorly paid drone jobs and increasing the demand for skilled positions. That has clearly been the experience of the financial service and insurance industries. Says Donald Mann, vice president of human resources at Prudential: "Fifteen years ago we had a pyramid-shaped staff, with large numbers of entry-level clerical jobs at the bottom. As technology was introduced, the shape has altered so that the pyramid looks like an onion or a football. We may be going toward a diamond." John Gosden, a vice president at Equitable, agrees with that sparkling outlook: "It's the boring jobs that are gone—opening mail, filing, wheeling trucks around, keypunching data into a mainframe." At Citicorp about one-third of all new hires fall into ei-

BEATING BACK THE BURGER BASHERS

■ Folks who fret about the decline of U.S. industry have made the golden arches of McDonald's the unofficial symbol of the service economy's shortcomings. In general the attacks have been coupled with the notion that the government should do more to aid manufacturers. Walter Mondale started the burger bashing with a campaign gibe about a future America in which the only jobs would be "sweeping up around Japanese computers and selling McDonald's hamburgers." Others who took up the cry included Chrysler Chairman Lee Iacocca, former Ford Chairman Philip Caldwell, and AMC Chairman Paul Tippett.

But where's the beef? According to the Bureau of Labor Statistics, cooks and counter personnel account for just over 1% of U.S. employment today—and that proportion will increase barely 0.1% by 1995. Only a small percentage of the more than 400,000 McDonald's employees earn much more than the minimum wage, but most are women and school kids seeking extra income and flexible hours—hardly the people Detroit wants.

McDonald's executives are mostly bemused by the attention. "It goes with being No. 1," says Robert Keyser, director of media relations. But they have mounted a counterattack of sorts. A recent television ad campaign celebrates the company's 30th birthday by honoring some of its eight million former "crew people," making the point that for most employees McDonald's offers a start rather than a career. One profile: a woman who began frying burgers as a teenager to pay for her contact lenses and who is now a successful ophthalmologist.

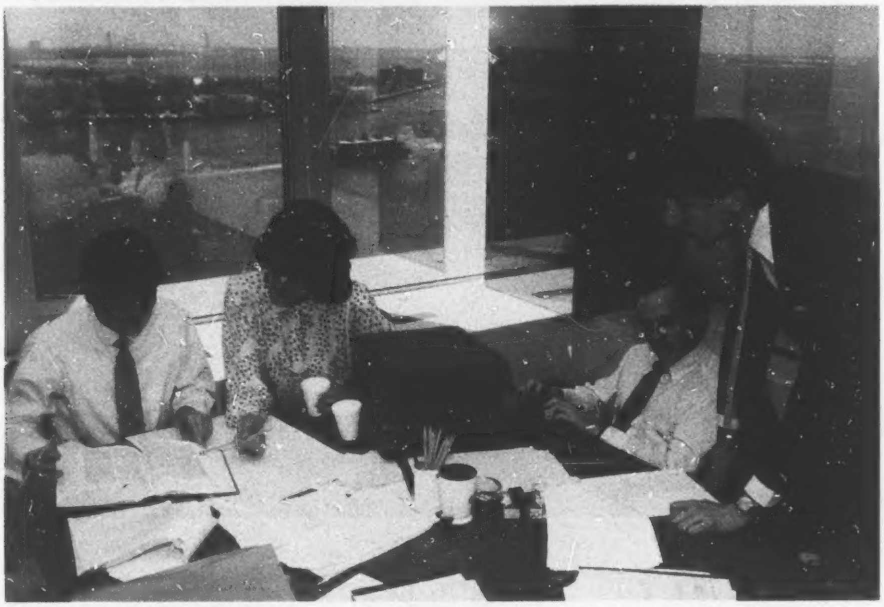
McDonald's drafted its corporate clown, Ronald McDonald, to deal with the auto moguls. Ronald mailed each a "McMissive" politely observing that McDonald's also provides jobs for thousands engaged in farming, meat processing, packaging, equipment manufacturing, and distribution. He closed his letter by noting, "There's nothing wrong with working at McDonald's just because McDonald's is working." Says Keyser: "We got nice replies back from all three."

ther the professional or managerial class, the highest-paid sectors of the economy. "That's a far cry from five to ten years ago," says Citicorp Chairman John Reed.

The riptides of change will buffet many individual occupations. BLS expects that the baby bust's diminishing ranks of college-bound teens will carry more than 100,000 college and university faculty positions out to sea. The word processor will slow the growth of secretarial slots. Still, for most of the displaced, equal or better opportunities are likely. The office of the future will keep a human face: the BLS expects some 180,000 new receptionists by 1995, a 50% increase. It also sees openings for 350,000 more accountants and 160,000-odd lawyers. The lawyers will delegate more work, however: the ranks of paralegals should double to about 90,000, making them the second-fastest-growing job category in the BLS's employment outlook.

The ghost of Ned Ludd in a white collar still haunts Wassily Leontief, who predicts that out in the 21st century, automation will retard employment growth in services as it did in manufacturing. But nothing that's happening so far points in that direction. Rather than fire employees, most companies prefer to retrain their existing work force. U.S. corporations spend an estimated $30 billion to $50 billion a year on training. For the secretary upgraded to word-processor operator, rising skill usually brings better pay.

High absolute growth: *by 1995 some 800,000 new janitors will join this hospital cleaner.*



High percentage growth: *the number of paralegals will nearly double, to 90,000, in a decade.*

MODERNIZING INDUSTRIES often create new employment opportunities. Stanford University economist Timothy Bresnahan estimates productivity in financial services has been growing at an annual average rate of 3% over the past two decades, thanks largely to huge investments in computers and telecommunications. During those years industry employment more than doubled to 6.8 million. Says Bresnahan: "Costs and prices in this industry have been falling relative to the rest of the economy, which helps explain why its employment share is rising." Leontief's own study of the employment outlook for the next 20 years suggests that the rapid spread of new information technologies should create more jobs than it displaces.

The "upskilling" of services coupled with a continued relative shrinkage in manufacturing employment does appear to pose problems for the poorly educated."The declining middle really refers to the declining prospects of people who just go to high school," says Richard Freeman, a labor economist at Harvard University. "The industries that offered those people good jobs are eroding." Some observers think that though teachers may have trouble finding college jobs, the 1990s should offer great employment prospects in retraining and vocational centers.

But the problems posed by a declining living standard for the undereducated are altogether different and far less threatening than Karl Marx's vision of society dividing into "two great hostile camps"—a specter of rich vs. poor raised by some who embraced the shrinking-middle-class hypothesis. And for others sometimes regarded as "disadvantaged"—young people, old people, and women—a service economy that places a premium on brainpower offers far more opportunity than an agricultural and industrial economy that demands sweat labor.

The shift to services doesn't mean the U.S. is producing fewer goods. Indeed, the manufacturing share of output has remained surprisingly stable: U.S. goods production as a share of GNP has hovered around 46% for more than two decades. An economy turning out the same amount of goods with fewer workers is an economy with more disposable income available for buying high-value services—which makes for a richer society. Rising service sector employment is largely a reflection of what's right with the U.S. economy rather than the reverse. ■

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IT'S SHAPE UP OR SHAKE OUT IN A SHOOK-UP WORLD

After living so long with high inflation and government regulation, service companies from banks and brokers to truckers and airlines are having to learn how to live without them. Competition is stiff. Consolidation abounds. Still, profits are up 19.5%.

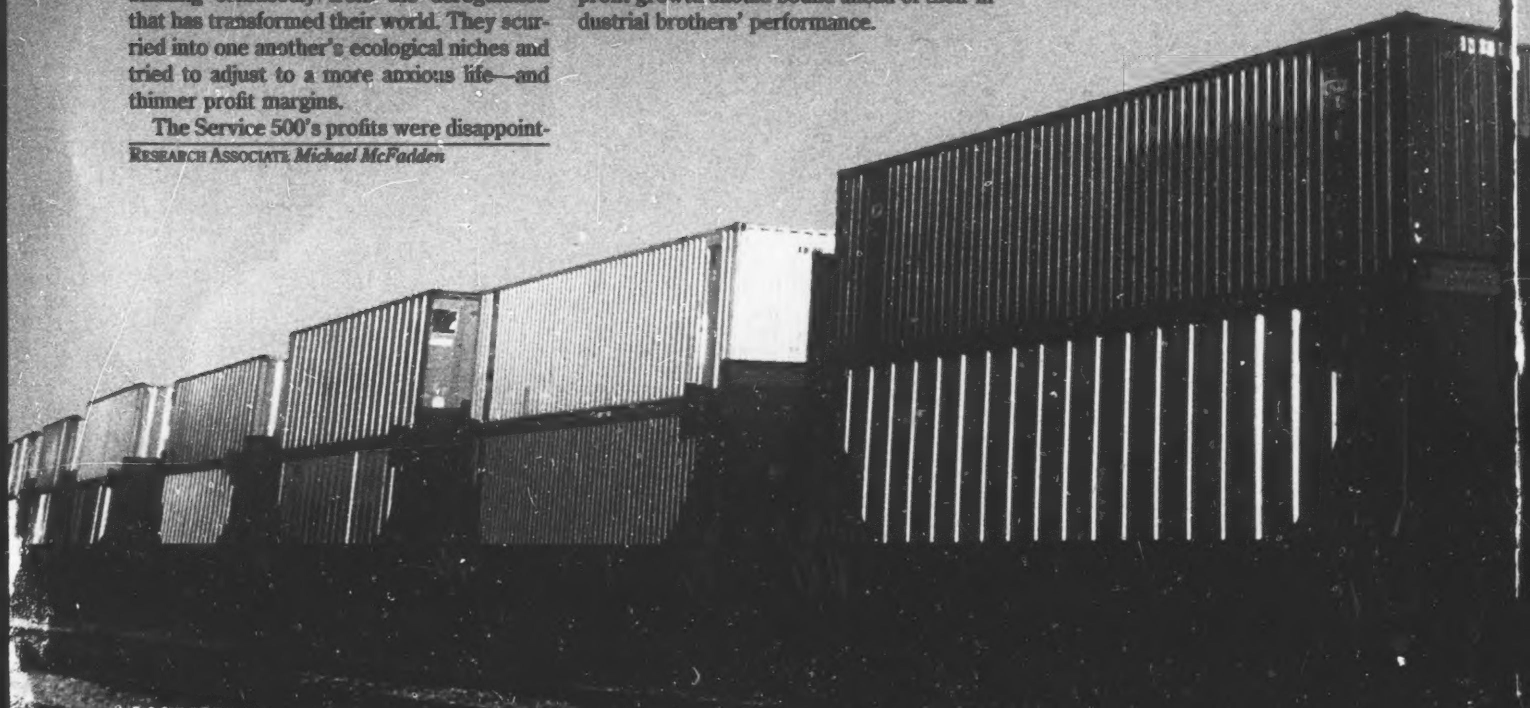
■ *by Myron Magnet*

GIVEN THAT MOST companies in the FORTUNE Service 500 haven't had a normal year for nearly a decade, it was business as usual for them in 1984: change, instability, and uncertainty held their by now familiar sway. Even as many of the 500 were still struggling with the legacy of inflation, the subsidence of inflation—known as disinflation—began dealing out a whole new set of problems. And while not long ago 350 of the companies were regulated, last year 300 of those were blinking confusedly from the deregulation that has transformed their world. They scurried into one another's ecological niches and tried to adjust to a more anxious life—and thinner profit margins.

The Service 500's profits were disappointing. With a 19.5% increase last year, they trailed badly behind the FORTUNE 500 industrial companies' growth of 25.6% (FORTUNE, April 29). Neither of those figures was up to what many experts had expected from last year's ebullient economy. The strong dollar held earnings of the industrial companies down; deregulation and disinflation shook the service companies by their lapels. Industrial companies typically get a bigger boost from a cyclical recovery. This year, with the economy slowing, Service 500 companies' profit growth should bound ahead of their industrial brothers' performance.

Transportation companies delivered the best profit increases among the Service 500: a jump of 55.7% last year on top of a gain of 64.8% in 1983. All kinds of transportation companies contributed: Burlington Northern's profits steamed ahead 47.2%, Allied Van Lines' earnings moved up 78.7%, and UAL's profits soared 98.8%. Life insurance companies revived last year because they finally resigned themselves to the steady de-

RESEARCH ASSOCIATE *Michael McFadden*



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The earnings of [illegible] were up 12.3%, and profits from the diversified service companies—[illegible] is the largest of these—increased [illegible]. Commercial banks on the [illegible] list had a 5% decrease in profits last year, largely because of the $1.1-billion hole dug by Continental Illinois, the twelfth-largest bank and the biggest money loser among all Service 500 companies. The diversified financial companies turned in the poorest profit performance, a 30.3% decrease in earnings, compliments of weak performances by savings companies—60 of the 100 companies on the list—especially the $590.5-million loss

M[illegible] the regulators began deregulating the amount of interest banks could pay back in the Seventies, bankers lost their large, artificially cheap supply of money. This rise in the cost of their basic raw material squeezed profit margins on their traditional activities.

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Double-stacked containers [illegible]

approached the insurance business, Chemical (B6) joined the growing number of banks acquiring discount brokerage firms, and J.P. Morgan & Co. (B5) and Bankers Trust (B9) pressed further against the Glass-Steagall Act's segregation of commercial from investment banking by getting into private placements of commercial paper, modest merger and acquisition deals, and Eurobond trading.

Citicorp, which widened its lead in assets over BankAmerica and cemented its position at the top of the banking list, led the geographical diversification by buying failing Florida and Illinois savings and loan associations that regulators despaired of rescuing any other way. Unremittingly and often successfully, Citi lobbied over 20 state governments. Says Senior Vice President James J. McDermott Jr. of Keefe Bruyette & Woods, a New York investment firm specializing in bank stocks, "Citi is seeking to circumvent the national prohibition on interstate banking by appealing to specific state interests."

Nervously watching these carpetbagging encroachments, regional banks badgered states to let them make acquisitions across state lines. Big banks would remain excluded from their territory. Other large banks, such as Security Pacific (B7) and Mellon (B11), continued to ease toward interstate banking by applying for charters for so-called nonbank banks—institutions that abstain either from taking demand deposits or from making commercial loans. Since they are therefore not defined as banks, they escape the interstate banking ban. Interstate banking, in other words, is already here.

Banks found that a big problem about inflation is that it can cool rapidly: disinflation proved the key determinant of their 1984 earnings. Steadily increasing inflation had encouraged banks to invest internationally in Latin America, and domestically in farmland, commercial real estate projects, and oil field development. That was great—until inflation waned at the start of the Eighties, oil prices sagged, and cash flows plummeted, leaving big craters in bank earnings.

The top 25 commercial banks on FORTUNE's list hold a hefty chunk of the debt of troubled energy and agricultural borrowers, as well as almost all that of the foreign borrowers. Their income fell 20.6%; return on equity was at an unmacho 8%. Net income for the bottom 75 of the 100—banks less exposed to the domestic and international troubles—rose an average 20.7% over 1983, and their return on equity was 12.7%.

THE EARNINGS of First Bank System (B14) of Minneapolis rose only 1% because of washouts of Midwestern agricultural loans. Mauled by losses on loans to California grape and avocado growers and to real estate developers, BankAmerica suffered an 11.5% earnings drop, and fellow Californian Crocker National (B1[illegible]) lost $324 million. While energy loan losses helped hold Texas banks like RepublicBank (B19) and Texas Commerce Bancshares (B21) to only modest earnings gains, they helped inflict a 52.9% drop on First Chicago (B10) and would have brought Continental to utter ruin but for the Federal Deposit Insurance Corporation. (Similar problems, sometimes compounded by fraud, caused 79 failures among smaller banks in 1984—two more than the Depression record of 1937; 848 banks landed on the FDIC problem list, vs. 183 a decade earlier.) Latin American loan troubles kept profit growth at Manufacturers Hanover (B4) to only 4.6%, while earnings at Chase Manhattan (B3) fell 5.5%.

Banks worked at strengthening their balance sheets last year by increasing capital and loan loss reserves at the expense of earnings. Besides pleasing regulators, the move was aimed at encouraging other banks and insurance companies to lend the banks money at low rates. Bank stock prices, at their nadir in May 1984 after the run on Continental, soared thereafter, to give shareholders in the median company on the bank list a total return (capital gain plus dividends) of 17.9%, vs. 8.1% for the Service 500 as a whole.

The thrift institutions—the savings and loan associations and savings banks—are just emerging from their Laocoön-like struggle with inflation. In the early Eighties thrifts, paying close to 16% for money while earning 9% or 10% on their loan portfolios, were slowly sinking beneath the waves. Congress threw them a line by uncapping loan rates and expanding the range of loans they were permitted to make.

The thrifts accordingly began selling

THE HIGHEST RETURN ON SALES

PROFITS IN PIPELINES—FOR NOW

While oil industry earnings suffered from declining energy prices last year, oil pipeline companies gushed profits. Exxon Pipeline, a wholly owned subsidiary of Exxon, made $399.18 million on sales of $1.025 billion—a return on sales of 38.9%, the highest of all companies on the Service 500. Just behind Exxon were the pipeline subsidiaries of British Petroleum, Atlantic Richfield, and Standard Oil (Ohio), which together reported an average return on sales of 32.1% in 1984. The four companies, which appear on the transportation list, are the principal owners of the 800-mile Trans Alaska Pipeline System, built in the Seventies to bring oil south from Prudhoe Bay to the ice-free port of Valdez for loading into tankers.

Why does this line pump money? Exxon Pipeline and the other pipeline companies charge their oil-producing parents around $6 a barrel to ship crude through the line, while paying about 65 cents a barrel to a service company set up to run the system. Since the service company runs and maintains the system, the pipeline companies have modest payroll costs. Sohio Pipe Line, with only 175 employees, had the highest sales per employee of all Service 500 companies—$7.5 million. The pipeline companies take out about 80 cents for depreciation on each barrel they ship. Income taxes, interest expense on bonds issued to finance the pipeline, and other sundries sop up $2.50 per barrel, but leave a handsome $1.85 profit.

Alaska suspects that the oil companies allow their pipeline subsidiaries to charge excessive shipping rates in order to avoid paying production royalties to the state. Royalties are calculated as a percent of the market value of the oil less transportation costs, so a higher pipeline rate reduces the royalties the state can assess. Alaska has fought the pipelines since 1977 to get the rates lowered. Since the end of last year Alaska has come to terms with the Arco and BP pipeline companies, which agreed to a 16% rate cut. Unless Exxon and Sohio go along with the settlement, though, the new rates probably won't stick. One thing is sure, says Kenneth Eaden, Arco Pipe Line's controller, "From the day we all settle, the rates of return you're seeing now won't be there in the future." —*Michael McFadden*

Allstate
INSURANCE

Diversified retailer: *Will plugging into Sears' network light up investment firm Dean Witter with high-wattage profits? Not yet, anyway.*

newly invented adjustable-rate mortgages, whose rates move up and down with the variations in a thrift's cost of funds. By last year Great Western Financial (F10), for instance, a well-run thrift in booming California, had increased adjustable-rate mortgages from 32% of its portfolio in 1983 to 53%. Its net earnings rose 35%, and analysts expect further growth—as much as 45% this year. But thrifts in less vigorous housing markets are having trouble making enough new loans to offset the earnings drag from old fixed-rate loans. "The transition problem is far from over," says Francis H. Schott, chief economist of Equitable Life, "and there may be anxious moments in the meantime."

A BYSTANDER, the life insurance industry got wounded when bank interest was deregulated, and it will most probably walk with a permanent limp. When interest rates soared, ordinary life policies, with undeclared and presumably minuscule dividends, became tough to sell. The sale got even tougher when companies that hadn't been big players in ordinary life insurance started pushing new products, called universal life policies, that resembled term life insurance policies tied to a money market fund. Old-line life companies, hoping to keep customers glued to ordinary life policies—whose selling costs the insurers often had not yet earned back—balked at introducing these fast-selling products at first. But necessity prevailed, and an epidemic of customers "twisting" from their old policies into the new ones wrung out the big companies in 1982 and 1983. In 1984 the worst part of the transition seemed to have ended, and some companies finished writing off the costs of canceled old policies. As a result, the industry as a whole, and especially companies like Aetna Life (L4) and Connecticut General Life (L8), had an improved year.

The high costs of servicing the new policies, which need daily computer updating—coupled with profit margins made lower by hot competition—mean life insurance will henceforward be a less profitable business. "That's going to make it difficult for a lot of small to medium-size companies to survive," says Leandro S. Galban Jr., a senior vice president at Donaldson Lufkin & Jenrette, a New York investment company.

Property and casualty insurance is notoriously cyclical. But the six-year downturn that hit bottom in 1984, says Richard E. Stewart, a New York insurance industry consultant, "was the heaviest price-competitive episode in the 20th century, probably ever." The disaster forced some companies, chiefly foreign, to abandon the field and survivors to close branches and fire employees. Allerton Cushman Jr., a Morgan Stanley security analyst, estimates that property and casualty companies paid out $1.20 in losses, reserve provisions, and operating expenses for every $1 they collected in premiums last year. Hence the poor performance of property and casualty specialists like U.S. Fidelity & Guaranty (F34)—the company with the biggest decrease in profits, 98.4%, among the Service 500. The hard times finally brought big price hikes, which bode better for the industry this year, if not for corporations seeking insurance (see Managing).

The brokerage business has had a decade to adjust to deregulation, but its performance last year was lackluster. Individual investors stayed away in droves from last year's flat stock market, instead buying fixed-income securities, which are less profitable for brokers to sell than equities. Shareholders in Merrill Lynch (F6), E.F. Hutton (F12), and Paine Webber (F21) lost 13% to 19.7% on their investment. Only Donaldson Lufkin & Jenrette's shareholders had much cause to smile: acquired by Equitable Life (L3), DLJ (F33) had a total return to investors of 80.5%, the highest on the Service 500.

With scarcely an initial public offering to underwrite in a stock market almost as moribund as Snow White, the best investment bankers made money through expertise in highly refined products. Salomon Brothers, which produced 77% of its parent Phibro-Salomon's pretax profits, flourished by trading the mortgage-backed securities the firm pioneered. Both Salomon and First Boston (F8) won big rewards from mastering the arcane arts of interest rate and currency swaps. "Finding new businesses is what Wall Street is up to now," says Paine Webber financial analyst Rodney S. Schwartz. "The traditional businesses are becoming less attractive as more people enter them."

The transportation list contains three further dramas of deregulation: the airlines, the truckers, and the railroads. With airline routes and fares unfixed for seven years, the strong are getting stronger. Four of the 17 airlines among the 50 largest transportation companies—UAL (T4), AMR (T7), Delta (T9), and USAir (T16)—earned 94% of the profits. What counted wasn't just cost control: People Express (T30), a newcomer to the list, had only a 0.3% return on operating revenues of $586.8 million, in spite of a no-frills approach to flying that extends down to non-union, relatively low pay scales. Financial analysts think AMR, the parent of American Airlines, best exemplifies good airline management, and cite its efficient computer reservation system, the imaginative financing that raised cash and short-term securities to nearly $1.4 billion last year, and a pioneering frequent-flier plan, which established brand loyalty in a relatively undifferentiated product. The company also gets full marks for lowering labor costs with a two-tier contract. United recently went on strike over its two-tier wage plan, and TWA may also face a strike on the issue.

Many of the weak, by contrast, are getting weaker. Frontier (T36), with its Denver hub invaded both by an aggressive giant, United, and a discounter, Continental, a subsidiary of Texas Air (T21), lost $31 million on operating revenues of $675 million. Pan American (T10), lost more money—$206.8 million—than all the other unprofitable airlines on the list combined.

TRUCKING AND RAILROADS are doing a similar deregulation dance. Only last year's recovery-propelled surge in freight volume allowed trucking profits to stay level in the face of ferocious price cutting. The big companies, such as Roadway (T18) and Yellow Freight (T20), have had to slash costs to compete against small, non-union companies in the traditionally high-profit part of trucking—the hauling of less-than-full-truckload shipments. A covey of smaller, inefficient union companies plunged into bankruptcy last year; this year, the surviving union competitors, like the airlines, negotiated a two-tier contract with the Teamsters.

Part of the trucking industry's problem is the 1980 deregulation of the railroads, which have gained traffic at the truckers' expense chiefly by offering volume discounts. The railroads could cut prices because they cut costs, mainly by shrinking employment. Negotiations now under way could yield significant productivity concessions in an industry proverbial for bloated salaries—over $40,000 on average, around $70,000 for a locomotive engineer—and cynically inefficient work rules. The big expected gain: that train crews will get a day's pay for every 160 miles of work (which sometimes takes no more than two hours) rather than the present 100 miles—a 60% productivity increase, however ridiculous it sounds. When traffic decreases, as it did in the first quarter of 1985, pressure for still higher productivity seems bound to intensify.

Seven of the top ten positions on the utilities list are held by the regional telephone companies, the divested offspring of Ma Bell. With rates strong, demand growing, and costs driven vigorously down by improved productivity, the telephone companies ranked in the top ten in profits too. Their shares produced an average total return of 29.0%. "No one," says financial analyst Edward M. Greenberg of Morgan Stanley, "ever expected to get

THE BIGGEST INCREASE IN SALES

MORTGAGING THE WAY TO GROWTH

When a savings and loan association doubles in size in a year, it is usually because regulators married a sick thrift to a healthy one. Notable exception: Homestead Financial Corp. of Burlingame, California, which last year grew 120.6% in revenues—to $295 million—without a single acquisition. The S&L holding company, which jumped from No. 73 to No. 56 on the list of diversified financial companies, also increased assets by 114.7% to $3 billion.

Homestead owes its remarkable growth to the buoyant California housing market and the popular adjustable-rate mortgages used to finance it. To take advantage of the mortgage bonanza, Homestead collected $1.4 billion in new deposits from New York brokerage houses. Called brokered deposits, these funds are certificates of deposit that brokerage firms place for their customers in commercial banks and thrifts. "It's cheaper and faster to buy the deposits than to wait for them to trickle into our branches," says Britt Evans, executive vice president of Homestead, whose 25 S&L branches attracted only $133 million in deposits last year. Homestead used the brokered CDs to purchase most of its adjustable-rate mortgages from other thrifts. By year's end, Homestead's mortgage loan portfolio had swollen 141% to $2.4 billion, yielding $205 million in interest revenues. The company got the other $90 million from investment income and fees for mortgage servicing.

The Federal Home Loan Bank Board has prohibited thrift institutions such as Homestead from gorging themselves on brokered deposits. In April the regulators took over Beverly Hills Savings & Loan, a thrift that had lost $100 million last year by investing its brokered deposits in bad real estate and other risky loans. The Board rules require thrifts with net worth of less than 3% of liabilities to limit brokered deposits to 5% of total deposits. So, Homestead will have to look elsewhere for its money. Its net worth was only 2.5% of liabilities at year-end and its brokered CDs accounted for an astonishing 62% of total deposits. —Michael McFadden

CITICORP SAVINGS

A silver lining for Citicorp lay in New Biscayne Federal's troubles: rescuing the faltering thrift let Citi into Florida.

that sort of performance out of a utility."

For the electric utilities, says Goldman Sachs analyst Ernest S. Liu, "It's still Charles Dickens's line—it was the best of times, it was the worst of times." For most companies, including Consolidated Edison (U20), Baltimore Gas & Electric (U45), and Northern States Power (U50), 1984 was one of the best years ever. With recovery-flush industrial plants hungry for power, electricity sales rose briskly. Regulators permitted price rises for the majority, boosting return on equity to a record 15%.

But as if from some lethal, toxic accident, investors fled from companies with still unfinished nuclear power plants. Consumers Power (U18), Long Island Lighting (U25), and Public Service Co. of Indiana (U40) all reduced or eliminated dividends and returned an average of minus 39.9% to investors. Still, no utility on the list lost money in 1984.

The retailers have always shown what free competition is all about. Here is an industry with too many players (FORTUNE, May 13), each convinced that, one way or another, he can grab a fatter share of market. Anticipating that 1984 would be a continuation of retailing's golden 1983, when earnings for retail companies skyrocketed 63.8%, department and general merchandise stores built up inventory. But customers didn't materialize, leading jittery merchants into a frenzy of pre-Christmas price competition. Thereupon consumers bought their usual number of goods—at the retailers' expense—and retailers' profits went up less than the rest of the Service 500 companies'.

MANY SERVICE 500 companies will not survive the current upheavals or will emerge from them as part of some other company. Consolidation is particularly likely among thrift institutions, banking companies, life insurers, and airlines. A federal moratorium that prevents newly public thrifts from being acquired expires in August; many thrifts look like takeover targets. Banking analysts envision that industry being dominated by a few giants, surrounded by many smaller, specialized local and regional banks. Of the nine Service 500 companies acquired last year, five were banks acquired by other banks.

Leandro Galban of Donaldson Lufkin & Jenrette says that the consolidation he expects among life insurers will be done at "less optimistic" prices than Wall Street is accustomed to. As for the airlines, Robert J. Joedicke, an investment analyst at Shearson Lehman Brothers, predicts that the industry will eventually include only half a dozen or so national carriers—UAL, AMR, Delta, NWA (the parent of Northwest), USAir, and Piedmont—along with some regional lines and others specializing in cut rates. Consolidation among Service 500 companies will not eliminate competition. By creating stronger players, many able to offer a variety of services, consolidation may well enhance it. ■

THE FORTUNE

SERVICE

500

DIRECTORY OF THE LARGEST U.S. NON-INDUSTRIAL CORPORATIONS

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THE 100 LARGEST DIVERSIFIED SERVICE COMPANIES

RANK 1984	RANK 1983	COMPANY	SALES[1] $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
1	1	**Phibro-Salomon** (New York)	29,911,000	38,370,000	1	212,000	8	2,406,000	2
2	2	**RCA** (New York)	10,111,400	8,220,700	2	341,000	1	2,090,000	3
3	●	**InterNorth** (Omaha)[2]	7,510,277	6,122,042	3	296,816	3	1,802,224	5
4	6	**Super Valu Stores** (Eden Prairie, Minn.)[4]	5,922,681	1,017,985	41	76,722	25	384,671	42
5	7	**Fleming Companies** (Oklahoma City)	5,511,819	939,409	44	49,572	34	351,785	47
6	4	**Halliburton** (Dallas)	5,445,719	5,352,282	4	329,595	2	3,384,191	1
7	8	**Farmland Industries** (Kansas City, Mo.)[3]	5,238,106	1,692,848	25	N.A.[4]		528,683	27
8	10	**CBS** (New York)	4,831,463	3,261,763	8	212,333	7	1,552,938	7
9	5	**Fluor** (Irvine, Calif.)[3]	4,401,130	3,891,618	6	1,000	81	1,696,363	6
10	9	**McKesson** (San Francisco)[7]	4,260,030	1,411,304	28	68,663	29	552,496	26
11	14	**American Broadcasting** (New York)	3,707,713	2,335,282	18	195,332	9	1,352,304	9
12	19	**Harvest States** (St. Paul)[3]	3,569,180	710,990	54	N.A.[4]		173,446	66
13	13	**Hospital Corp. of America** (Nashville)	3,498,644	4,839,128	5	296,739	4	1,869,631	4
14	12	**American Hospital Supply** (Evanston, Ill.)	3,448,500	2,461,400	15	227,800	6	1,497,300	8
15	●	**ARA Services** (Philadelphia)[3,10]	3,406,071	1,440,490	27	64,436	30	587,054	24
16	16	**Alco Standard** (Valley Forge, Pa.)[10]	3,392,431	1,157,873	36	64,260	31	424,509	36
17	15	**Tesoro Petroleum** (San Antonio)[10]	3,118,845	1,106,881	38	17,314	58	438,381	34
18	21	**Wetterau** (Hazelwood, Mo.)[7]	2,684,087	435,158	66	22,151	51	156,803	68
19	17	**Associated Milk Producers** (San Antonio)	2,531,733	343,386	79	N.A.[4]		113,797	78
20	24	**IU International** (Wilmington, Del.)	2,514,817	1,347,330	29	7,900	73	355,168	46
21	20	**Ryder System** (Miami)	2,406,900	2,910,000	9	133,900	14	766,400	18
22	32	**Dun & Bradstreet** (New York)[11]	2,397,333	2,288,267	19	234,883**	5	1,225,513	11
23	22	**Amfac** (San Francisco)	2,392,366	1,289,346	33	(14,149)	84	406,285	38
24	26	**Sysco** (Houston)[10]	2,317,318	599,689	60	45,149	36	293,008	52
25	25	**Genuine Parts** (Atlanta)	2,302,594	948,133	43	119,667	18	701,113	21
26	40	**AGRI Industries** (Des Moines)[3]	2,296,272	199,349	93	N.A.[4]		43,612	96
27	11	**Greyhound** (Phoenix)	2,201,121	2,346,724	17	125,027	16	1,141,989	14
28	38	**National Medical Enterprises** (Los Angeles)[7]	2,064,378	2,334,173	20	121,288	17	766,206	19
29	23	**Morrison-Knudsen** (Boise)	2,008,936	838,412	50	47,613	38	357,126	45
30	42	**American Medical International** (Beverly Hills, Calif.)[4]	1,963,544	2,623,960	11	137,063	13	795,685	17
31	27	**Humana** (Louisville)[7]	1,961,189	2,577,847	13	193,341	10	743,185	20
32	30	**Castle & Cooke** (Honolulu)[10]	1,831,415	1,031,436	40	(76,667)	89	319,029	51
33	34	**Holiday Inns** (Memphis)	1,789,818	2,348,888	16	130,975	15	1,024,457	15
34	35	**Bergen Brunswig** (Los Angeles)[7]	1,783,370	379,391	71	18,364	57	139,375	71
35	29	**Turner** (New York)[10]	1,693,574	514,247	65	12,698	65	58,861	93
36	●	**Pacific Resources** (Honolulu)	1,670,507	538,784	64	1,339	80	140,142	70
37	44	**Walt Disney Productions** (Burbank, Calif.)[10]	1,655,977	2,739,443	10	97,844	20	1,155,485	13
38	35	**MCA** (Universal City, Calif.)	1,651,342	1,943,742	23	94,987	21	1,221,935	12
39	49	**Avnet** (New York)[10]	1,635,349	910,771	45	84,808	24	603,403	22
40	39	**Farm House Foods** (Milwaukee)[7]	1,518,290	262,592	88	2,681	76	29,687	98
41	33	**Whittaker** (Los Angeles)[7]	1,457,000	873,144	48	48,870	37	348,415	48
42	53	**Beverly Enterprises** (Pasadena, Calif.)	1,430,073	1,700,214	24	46,965	35	434,522	35
43	41	**CFS Continental** (Chicago)[12,16]	1,377,339	360,162	74	19,581	54	134,583	74
44	36	**Foster Wheeler** (Livingston, N.J.)	1,336,859	897,488	47	38,374	43	383,101	43
45	46	**Eastern Gas & Fuel Associates** (Boston)	1,315,886	1,301,130	31	16,786	60	508,186	28
46	57	**Waste Management** (Oak Brook, Ill.)	1,314,761	1,960,796	22	142,809	12	885,670	16
47	51	**Bally Manufacturing** (Chicago)	1,308,843	1,470,220	26	(100,411)	99	368,721	44
48	45	**Super Food Services** (Dayton, Ohio)[7]	1,290,566	148,696	95	7,278	74	52,068	95
49	31	**Pittston** (Greenwich, Conn.)	1,284,439	908,497	42	(36,147)	87	501,366	29
50	52	**Nash-Finch** (St. Louis Park, Minn.)	1,233,727	233,034	91	11,696	68	100,094	86

THE DEFINITIONS AND CONCEPTS UNDERLYING THE FIGURES IN THIS DIRECTORY ARE EXPLAINED ON PAGE 280.

● Not on last year's list.

N.A. Not available.

** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 280.

† Average for the year; see the reference to "employees" on page 280.

‡ Reflects an extraordinary charge of at least 10%; see the explanations of "net income" and "earnings per share" on page 280.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] Net sales include all operating revenues and revenues from discontinued operations when they are published. All figures are for the fiscal year that ended December 31, 1984, unless otherwise noted. Sales of subsidiaries are included when they are consolidated. All companies on the list must have derived more than 50% of their revenues from non-manufacturing and/or non-mining businesses. Excluded (but eligible for the lists that follow) are companies deriving more than 50% of their revenues solely from banking, life insurance, finance, retailing, transportation, or utilities.

[2] Company was No. 29 among the 1983 Largest Utilities.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
7,000	53	0.7	71	8.3	60	1.48	3.35	0.96	4.41	56	2.09	31	29.94	28
106,000	2	3.4	37	13.2§	38	3.30	2.10	1.45	8.57	45	6.75	26	18.68	53
10,551	44	4.0	33	15.2§	28	5.61	4.77	2.65	7.78	48	13.67	15	18.63	54
24,461	19	1.3	61	20.0	9	2.08	1.85	0.30	21.47	14	10.31	20	36.21	14
14,160	32	0.9	67	14.1	35	2.70	2.36	0.82	12.59	38	21.09	10	25.97	34
67,540	5	6.1	16	9.7	56	2.87	2.33‡	1.27	8.51	46	(24.95)	67	4.97	76
7,700	51	—		—		N.A.	N.A.	N.A.	—		—		—	
30,000	17	4.4	30	13.7	37	7.15	6.31	3.80	6.53	50	13.55	16	13.87	63
32,153	14	0.0	81	0.1	81	0.01	0.35	0.70	(24.4[illegible]	72	(11.01)	50	12.41	66
11,100	41	1.6	58	12.4§	42	3.78	3.36	2.40	[illegible]	55	1.94	32	20.73	46
13,000	37	5.3	23	14.4	33	6.71	5.45	1.95	13.17	34	16.36	13	25.86	36
3,000†	79	—		—		N.A.	N.A.	N.A.	—		—		—	
79,000	4	8.5	9	15.9	22	3.35	2.80	0.35	25.49	8	(3.23)	37	36.95	12
31,300	15	6.9	14	15.9	21	3.23	2.86	0.85	14.24	25	(24.69)	66	7.60	74
115,000	1	1.9	53	11.0	52	5.19	4.51	3.65	3.57	59	—		—	
16,400	29	1.9	52	14.9§	29	2.85	2.70	1.17	9.26	44	(9.22)	49	28.79	29
3,000	80	0.6	73	2.5§	76	0.59	3.05	5.76	(20.38)	70	(25.71)	69	(0.42)	77
8,096	50	0.8	69	8.6§	61	2.05	1.91	1.10	6.44	52	36.90	3	17.51	55
3,440	75	—		—		N.A.	N.A.	N.A.	—		—		—	
37,000	12	0.3	75	1.0§	79	0.27	1.74	2.77	(20.77)	71	(24.11)	64	19.51	49
21,825	21	5.5	21	17.7	13	2.86	2.21	(0.63)	—		(12.14)	52	33.56	21
53,700	7	10.7	5	20.9	7	6.86**	2.97	0.75	24.77	11	8.77	25	25.23	37
21,000	22	—		—		(0.93)	(4.70)	4.86	—		(29.44)	73	8.07	73
8,300	48	2.0	51	15.4	26	2.14	1.94	0.43	17.50	21	(6.55)	47	33.23	22
13,850	35	5.2	24	17.1	16	2.20	1.91	0.68	12.46	39	9.15	24	14.85	62
552	98	—		—		N.A.	N.A.	N.A.	—		—		—	
35,392†	13	5.7	20	10.9§	53	2.56	2.22	1,37	6.45	51	0.30	33	16.95	57
55,100	6	5.9	18	15.8§	24	1.74	1.47	0.17	26.48	6	3.63	30	51.86	3
20,650	23	2.2	48	12.2	46	4.13	3.97	1.10	14.13	27	25.80	7	28.08	31
40,000	10	7.0	13	17.2	15	1.64	2.05	0.21	23.05	12	(13.77)	54	40.33	7
42,500	9	9.9	6	25.4§	4	1.96	1.63	0.08	37.02	2	10.17	21	58.48	2
37,000†	11	—		—		(3.13)	(1.95)	1.72	—		(27.46)	71	8.94	72
52,818	8	7.4	11	12.8	40	3.59	3.28	1.06	12.97	36	(6.03)	45	26.84	32
2,479	87	1.1	64	13.1	39	1.45	1.50	0.14**	26.26	7	(4.92)	43	39.15	9
2,460	88	0.8	70	21.6	6	3.09	2.93	0.74	15.33	23	19.49	12	30.73	25
844	95	0.1	80	0.9	80	(0.21)	0.67	0.18	—		(38.85)	76	10.08	70
28,000	18	5.9	17	8.5	63	2.73	2.70	1.54	5.90	53	16.06	14	13.03	65
18,800	26	5.8	19	7.8	68	1.96	3.06	1.29	4.26	57	(4.69)	41	25.17	38
9,700	45	5.3	22	14.4	34	2.44	1.43	0.94	10.05	40	(23.10)	63	37.01	11
4,440	68	0.2	77	12.3	45	0.41	0.02**	0.06‡	20.33	17	(43.75)	81	—	
10,800	42	3.1	39	12.6	41	3.01	2.55	0.44	21.20	15	25.54	8	36.13	15
87,000	3	3.3	38	10.8§	54	1.80	1.45	0.51‡	13.37	32	28.40	6	42.21	4
4,500	67	1.4	60	14.6	32	2.23	1.87	0.91	9.42	42	—		—	
14,200†	31	2.7	44	9.2	57	1.03	1.30	0.41	9.57	41	(25.39)	68	23.69	41
6,800	54	1.3	62	3.3	74	0.73	1.87	2.10	(10.04)	66	12.71	17	13.81	64
20,100	24	10.8	4	16.1	19	2.93	2.50	0.31	25.18	10	(3.80)	39	38.85	10
19,000	25	—		—		(2.36)	0.20	0.48	—		(39.75)	77	18.98	51
1,875†	90	0.6	72	13.8§	36	2.20	1.94	0.58	14.26	24	(5.24)	44	20.56	30
13,875	34	—		—		(0.69)	(2.08)	2.80	—		(31.25)	75	(2.14)	78
5,500†	59	1.0	66	11.7	49	2.30	2.18	1.46	4.65	54	—		—	

[3] Figures are for fiscal year ended February 29, 1984.

[4] Cooperatives provide only net margin figures, which are not comparable with the net income figures in these listings.

[5] Figures are for fiscal year ended August 31, 1984.

[6] Figures are for fiscal year ended October 31, 1984.

[7] Figures are for fiscal year ended March 31, 1984.

[8] Figures are for fiscal year ended May 31, 1984.

[9] Company was No. 28 among the 1983 Largest Retailing Companies.

[10] Figures are for fiscal year ended September 30, 1984.

[11] Acquired A.C. Nielsen (1983 rank: No. 79) on August 29, 1984.

[12] Figures are for fiscal year ended June 30, 1984.

[13] Formed as a holding company for Turner Construction on June 1, 1984.

[14] Company is owned by A.E. Staley Manufacturing (No. 170 on the FORTUNE 500).

THE 100 LARGEST DIVERSIFIED SERVICE COMPANIES

RANK 1984	RANK 1983	COMPANY	SALES[1] $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
51	59	**Centex** (Dallas)[7]	1,183,261	1,069,100	39	50,810	33	411,216	37
52	56	**Subaru of America** (Pennsauken, N.J.)[6]	1,174,912	337,846	80	60,018	32	199,648	60
53	65	**Commercial Metals** (Dallas)[5]	1,170,896	269,844	85	9,701	70	125,751	77
54	83	**Price** (San Diego)[5]	1,157,840	266,382	86	28,586	48	101,419	85
55	47	**Dairymen** (Louisville)[5]	1,111,377	249,769	89	N.A.[4]		84,168	87
56	50	**U.S. Home** (Houston)	1,103,640	815,846	51	(43,934)	88	275,436	53
57	62	**W.W. Grainger** (Skokie, Ill.)	1,059,363	653,978	56	68,942	28	463,874	32
58	58	**Di Giorgio** (San Francisco)	1,036,000	376,201	72	(4,895)	83	110,060	79
59	54	**Universal Leaf Tobacco** (Richmond, Va.)[12]	1,019,480	458,581	66	38,282	41	233,249	57
60	68	**Browning-Ferris Industries** (Houston)[10]	1,000,814	869,724	49	99,168	22	465,736	31
61	55	**Indiana Farm Bureau Cooperative** (Indianapolis)[5]	9[illegible]2,631	236,494	90	N.A.[4]		80,454	88
62	43	**Fischbach** (New York)[10]	971,853	453,168	67	4,293‡	75	174,691	65
63	60	**Gelco** (Eden Prairie, Minn.)[10]	928,955	2,625,332	12	15,617	61	209,601	58
64	63	**NIKE** (Beaverton, Ore.)[6]	919,806	559,159	62	40,690	40	274,536	54
65	74	**Automatic Data Processing** (Roseland, N.J.)[22]	888,914	781,823	52	75,130	26	475,567	30
66	61	**Univar** (Seattle)[3]	881,411	286,858	84	9,196	71	101,949	84
67	73	**Transway International** (White Plains, N.Y.)	866,717	375,493	73	23,274	50	188,633	63
68	76	**ServiceMaster Industries** (Downers Grove, Ill.)	849,734	103,394	99	30,493	47	67,877	90
69	67	**GATX** (Chicago)	847,300	2,513,900	14	36,700	42	455,600	33
70	69	**Dravo** (Pittsburgh)	844,911	539,703	63	(20,110)	86	202,043	59
71	●	**John Blair** (New York)	842,438	604,527	59	10,469	69	128,437	76
72	71	**Pacific Gamble Robinson** (Kirkland, Wash.)	842,075	142,620	97	1,393	79	53,831	94
73	64	**Pulte Home** (West Bloomfield, Mich.)	839,081	387,741	70	17,284	59	148,402	69
74	66	**Perini** (Framingham, Mass.)	838,136	310,456	82	1,951	78	102,627	82
75	78	**Kay** (Alexandria, Va.)	827,678	318,548	81	2,395	77	34,963	97
76	72	**Blount** (Montgomery, Ala.)[3]	817,740	365,665	75	21,935	52	109,856	80
77	86	**Electronic Data Systems** (Dallas)[12, 16]	786,106	607,324	58	15,514	62	345,449	49
78	88	**Cox Communications** (Atlanta)	742,855	1,110,717	37	87,292	23	574,320	25
79	●	**Kelly Services** (Troy, Mich.)	741,155	148,943	94	26,698	49	108,763	81
80	96	**Arrow Electronics** (Greenwich, Conn.)	740,017	344,581	78	12,817	64	80,091	89
81	85	**Sunkist Growers** (Sherman Oaks, Calif.)[6]	732,222	214,104	92	N.A.[4]		59,102	92
82	●	**Berkshire Hathaway** (Omaha)	729,179	2,035,203	21	148,895	11	1,271,761	10
83	●	**Pioneer Hi-Bred International** (Des Moines)[5]	716,061	588,464	61	69,141	27	393,570	39
84	77	**Computer Sciences** (El Segundo, Calif.)[7]	712,224	397,994	69	18,266	56	158,327	67
85	84	**Parker Pen** (Janesville, Wis.)[3]	708,817	350,495	76	11,796	67	137,629	73
86	75	**MGM/UA Entertainment** (Culver City, Calif.)[3]	706,902	1,346,874	30	34,697	44	391,169	40
87	82	**Southern States Cooperative** (Richmond, Va.)[10]	697,514	291,024	83	N.A.[4]	61	138,797	72
88	81	**Hilton Hotels** (Beverly Hills, Calif.)	686,564	1,163,752	35	113,983	19	592,826	23
89	●	**American Continental** (Phoenix)[17]	682,096	3,301,916	7	20,513	53	132,880	75
90	87	**Early & Daniel Industries** (Indianapolis)[5]	671,376	72,273	100	(3,193)	82	17,665	100
91	92	**DEKALB AgResearch** (Dekalb, Ill.)[6]	653,200	904,200	46	31,300	46	390,600	41
92	90	**Interpublic Group of Companies** (New York)	644,393	713,582	53	32,794	45	176,301	64
93	●	**Dynalectron** (McLean, Va.)	638,224	265,040	87	12,043	66	102,548	83
94	95	**Caesars World** (Los Angeles)[10]	620,590	619,445	57	18,840	55	193,432	61
95	80	**Landmark** (Columbus, Ohio)[5]	619,580	145,572	96	N.A.[4]		18,300	99
96	●	**Union Equity Co-Operative Exchange** (Enid, Okla.)	605,539	105,336	98	N.A.[4]		64,267	91
97	94	**Ramada Inns** (Phoenix)	600,153	698,419	55	8,821**	72	248,753	56
98	98	**Kaufman & Broad** (Los Angeles)[18]	600,070	1,296,210	32	42,635	39	250,213	55
99	●	**Anixter Bros.** (Skokie, Ill.)[18]	597,806	346,273	77	14,937	63	191,300	62
100	100	**Western Co. of North America** (Fort Worth)	593,755	1,180,484	34	(14,553)	85	335,088	50
		TOTALS	208,041,058	179,902,970		5,494,334		49,019,940	

● Not on last year's list.
N.A. Not available.
** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.
† Average for the year; see the reference to "employees" on page 200.

‡ Reflects an extraordinary charge of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.
§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.
[15] Figures are for fiscal year ended July 31, 1984.

[16] Company is owned by General Motors (No. 2 on the FORTUNE 500).
[17] Acquired First Lincoln Financial (No. 87 among the 1983 Largest Diversified Financial Companies) on February 22, 1984.
[18] Figures are for fiscal year ended November 30, 1984.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
4,000	70	4.3	32	12.4	42	2.55	2.01	0.75	12.97	37	(2.55)	35	25.91	35
775	97	5.1	25	30.1	2	9.84	8.17	(0.60)	—		37.51	2	—	
2,939	82	0.8	68	7.7	69	1.50	1.25	3.31	(7.60)	65	(21.18)	62	18.86	52
3,838	72	2.5	47	28.2	3	1.27	0.67	N.A.	—		28.96	5	—	
4,879	65	—		—		N.A.	N.A.	N.A.	—		—		—	
3,992	71	—		—		(1.27)	1.13	0.33	—		(44.43)	84	23.09	42
6,240	55	6.5	15	14.9	30	4.76	3.58	1.30	13.86	30	(4.71)	42	14.99	61
3,800	73	—		—		(0.98)	1.21	(0.55)	—		10.69	19	20.91	44
14,000†	33	3.8	34	16.4§	18	2.21	2.10	0.60	13.93	29	20.93	11	26.53	33
16,800	28	8.9	8	19.2	11	2.60	2.40	0.69	14.13	26	(11.72)	51	31.09	24
897†	94	—		—		N.A.	N.A.	N.A.	—		—		—	
12,000	39	0.4	74	2.5	77	1.12‡	7.39	3.31	(10.27)	67	(31.21)	74	10.35	69
6,060	57	1.7	56	7.5	70	1.12	(2.53)	0.57	7.05	49	(17.57)	59	20.11	47
4,100	69	4.4	29	14.8	31	1.07	1.53	N.A.	—		(42.93)	80	—	
17,500	27	8.5	10	15.8	23	2.14	1.86	0.41	17.97	20	11.52	18	20.75	45
3,024	78	1.0	65	9.0	58	1.66	0.92	1.10	4.17	58	(14.82)	56	16.64	58
6,105	56	2.7	42	12.3	44	3.54	2.24	3.01	1.64	62	(6.28)	46	17.46	56
7,407	52	3.6	36	44.9	1	1.40	1.17	0.15	25.24	9	(13.74)	53	31.98	23
5,100	63	4.3	31	8.1	65	2.37	(7.84)	4.54	(6.29)	64	6.00	27	9.04	71
8,296	49	—		—		(1.49)	(1.11)	1.56	—		(15.93)	58	6.83	75
8,900	46	1.2	63	8.2	64	1.31	2.32	0.10	28.91	4	(44.29)	82	34.05	20
4,700	66	0.2	79	2.6	75	0.71	1.61	2.58	(12.12)	69	(3.96)	40	11.28	67
1,700	91	2.1	49	11.7	50	0.65	1.84	0.003	69.44	1	(24.67)	65	71.05	1
5,350†	61	0.2	78	1.9	78	0.60	2.85	1.99**	(11.30)	68	(3.52)	38	30.39	26
3,728	74	0.3	76	6.9	71	0.66	0.50	(0.70)	—		(20.00)	61	19.48	50
5,564	58	2.7	43	20.0	8	1.83	1.38	0.32	18.96	18	(1.71)	34	35.61	17
22,000	20	2.0	50	4.5	72	1.35	1.05	0.32	15.48	22	—		—	
8,600	47	11.8	3	15.2	27	3.09	2.75	0.54	18.95	19	10.13	22	35.63	16
2,900	83	3.6	35	24.6	5	2.06	1.34	0.31	20.72	16	23.91	9	41.79	5
2,861	84	1.7	55	16.0	20	2.00	0.85	0.58	13.13	35	(42.39)	79	30.19	27
1,486	92	—		—		N.A.	N.A.	N.A.	—		—		—	
3,125	77	20.4	1	11.7	48	129.82	106.40	7.19	33.56	3	(2.67)	36	41.37	6
2,947	81	9.7	7	17.6	14	2.17	1.37	0.62	13.35	33	9.37	23	16.40	59
13,400	36	2.6	45	11.5	51	1.32	1.32	0.12	27.10	5	(27.74)	72	24.03	40
5,485	60	1.7	57	8.6	62	0.70	(0.80)	0.53	2.76	60	(15.03)	57	24.09	39
2,555	86	4.9	27	8.9	59	0.69	0.83	N.A.	—		45.13	1	—	
2,300	89	—		—		N.A.	N.A.	N.A.	—		—		—	
31,000	16	16.6	2	19.2	10	4.33	4.20	0.54	23.03	13	4.25	29	39.55	8
1,150	93	3.0	41	15.4	25	0.92	1.64	N.A.	—		(44.32)	83	—	
300	99	—		—		(47.73)	15.54	54.49	—		—		—	
5,300	62	4.8	28	8.0	66	2.37	1.26	1.88	2.34	61	(18.51)	60	(3.21)	79
12,000	40	5.1	26	18.6	12	3.03	2.43	0.81	14.05	28	36.06	4	36.37	13
12,000	38	1.9	54	11.7	47	1.23	1.10	0.34	13.72	31	(9.08)	48	21.27	43
10,660	43	3.0	40	9.7	55	0.66	(0.97)‡	0.27**	9.39	43	(14.13)	55	34.76	19
830	96	—		—		N.A.	N.A.	N.A.	—		—		—	
294	100	—		—		N.A.	N.A.	N.A.	—		—		—	
14,250	30	1.5	59	3.6	73	0.24**	0.38**	0.35	(3.70)	63	(41.77)	78	10.53	68
3,200	76	7.1	12	17.0	17	2.97	1.73**	(1.11)**	—		6.00	28	20.09	48
2,700	85	2.5	46	7.8	67	0.83	0.72	0.39	7.78	47	(27.24)	70	34.98	18
5,095	64	—		—		(0.49)	(0.67)	0.09	—		(51.32)	85	15.09	60
1,601,878														

RANK		COMPANY	ASSETS[1]	DEPOSITS		LOANS[2]		EMPLOYEES	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	NUMBER	RANK
1	1	**Citicorp** (New York)	150,586,000	90,349,000	2	102,707,000	1	71,000	2
2	2	**BankAmerica Corp.** (San Francisco)	117,679,502	94,047,703	1	84,043,461	2	87,317	1
3	3	**Chase Manhattan Corp.** (New York)§	86,883,018	59,680,011	3	61,241,947	3	43,600	3
4	4	**Manufacturers Hanover Corp.** (New York)	75,713,707	44,025,759	4	57,580,748	4	32,335	5
5	5	**J.P. Morgan & Co.** (New York)	64,126,000	38,760,000	5	35,239,000	6	12,939	15
6	6	**Chemical New York Corp.**	52,236,326	33,697,684	6	36,881,590	5	20,126	7
7	9	**Security Pacific Corp.** (Los Angeles)	46,117,443	31,006,339	8	32,491,663	7	29,303	6
8	7	**First Interstate Bancorp.** (Los Angeles)	45,543,888	33,603,785	7	28,567,464	8	33,476†	4
9	10	**Bankers Trust New York Corp.**	45,208,147	25,559,080	10	23,148,662	11	10,409	19
10	11	**First Chicago Corp.**	39,845,731	28,591,917	9	25,284,052	9	13,913	13
11	13	**Mellon Bank Corp.** (Pittsburgh)[4]	30,602,815	18,997,309	12	19,382,857	13	14,532	11
12	8	**Continental Illinois Corp.** (Chicago)	30,413,791	15,055,931	19	23,969,789	10	9,618	22
13	12	**Wells Fargo & Co.** (San Francisco)	28,184,124	20,201,237	11	22,633,556	12	15,400	10
14	17	**First Bank System** (Minneapolis)	23,437,746	14,782,096	20	13,158,129	22	9,490†	24
15	14	**Crocker National Corp.** (San Francisco)[6]	22,322,223	18,015,352	13	15,514,472	14	14,100	12
16	19	**Bank of Boston Corp.**	22,078,819	15,258,266	18	14,346,131	17	16,000	8
17	15	**Marine Midland Banks** (Buffalo)[5]	22,055,697	15,690,831	16	15,042,480	16	11,845†	16
18	16	**InterFirst Corp.** (Dallas)	21,617,000	17,211,000	14	15,064,000	15	10,442	18
19	21	**RepublicBank Corp.** (Dallas)	21,594,769	15,622,377	17	14,124,035	18	8,587	27
20	18	**Norwest Corp.** (Minneapolis)	21,345,800	14,614,900	21	13,311,800	20	15,900	9
21	20	**Texas Commerce Bancshares** (Houston)	20,732,000	14,481,000	22	13,261,000	21	8,129	29
22	28	**MCorp** (Dallas)[7]	20,697,000	16,585,000	15	13,656,000	19	11,819	17
23	22	**Irving Bank Corp.** (New York)	18,982,403	13,446,875	23	11,047,130	24	9,500	23
24	23	**First City Bancorp. of Texas** (Houston)	17,318,567	13,032,828	24	11,488,103	23	8,804	26
25	25	**NCNB Corp.** (Charlotte, N.C.)	15,678,599	11,310,882	25	9,487,189	26	9,229	25
26	26	**Bank of New York Co.**	15,156,758	10,527,969	27	10,172,079	25	7,457	33
27	27	**PNC Financial Corp.** (Pittsburgh)	14,869,845	8,976,249	30	7,775,340	27	7,219	34
28	24	**NBD Bancorp.** (Detroit)	14,231,951	10,086,581	28	6,969,064	30	7,092†	35
29	30	**Barnett Banks of Florida** (Jacksonville)	12,501,130	10,966,449	26	7,522,789	28	12,946	14
30	29	**Republic New York Corp.**	12,382,370	8,236,782	32	2,738,911	76	2,400	97
31	48	**National City Corp.** (Cleveland)[9]	12,372,576	9,238,234	29	6,974,622	29	9,780	21
32	51	**First National State Bancorp.** (Newark)[10]	10,679,863	8,711,658	31	5,826,906	35	8,500	28
33	32	**Southeast Banking Corp.** (Miami)	9,868,844	7,640,927	35	5,978,538	33	7,087	36
34	34	**CoreStates Financial Corp.** (Philadelphia)	9,848,247	7,070,301	39	6,117,878	32	6,517	40
35	35	**Comerica** (Detroit)	9,630,510	7,621,089	36	5,116,349	42	6,070	43
36	39	**Allied Bancshares** (Houston)	9,629,655	7,896,050	34	6,943,091	31	3,600	81
37	31	**Sun Banks** (Orlando, Fla.)	9,401,581	7,979,388	33	5,788,734	37	9,796	20
38	43	**Banc One Corp.** (Columbus, Ohio)	9,106,093	7,407,238	37	5,791,783	36	7,901	31
39	42	**Harris Bankcorp.** (Chicago)[11]	8,828,211	6,247,909	43	4,598,804	50	6,263	41
40	36	**Valley National Corp.** (Phoenix)	8,777,274	7,388,354	38	5,827,550	34	6,941	38
41	41	**National Westminster Bank USA** (New York)	8,726,726	7,019,218	40	5,602,057	38	4,500	62
42	40	**Wachovia Corp.** (Winston-Salem, N.C.)	8,716,984	6,380,998	42	4,927,382	46	6,755	39
43	44	**Sovran Financial Corp.** (Norfolk, Va.)	8,286,484	6,237,867	44	5,487,861	39	8,066	30
44	45	**Citizens & Southern Georgia Corp.** (Atlanta)	8,030,037	5,727,790	48	5,001,495	44	6,200	42
45	38	**Union Bank** (Los Angeles)[12]	7,970,656	5,943,808	45	5,057,319	43	5,277	50
46	68	**Norstar Bancorp.** (Albany, N.Y.)	7,909,251	6,423,669	41	4,005,395	56	7,787	32
47	53	**Rainier Bancorp.** (Seattle)	7,762,145	5,471,159	50	5,146,673	41	5,436	49
48	33	**European American Bancorp.** (New York)[13]	7,518,548	5,621,899	49	5,452,520	40	4,199	66
49	49	**U.S. Bancorp.** (Portland, Ore.)	7,496,128	4,944,224	54	4,621,110	49	5,491	47
50	47	**First Union Corp.** (Charlotte, N.C.)	7,320,207	4,092,687	76	4,085,155	55	5,645	46

N.A. Not available.
† Average for the year; see the reference to "employees" on page 200.
§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] As of December 31, 1984.
[2] Net of unearned discount and loan loss reserve. Figure includes lease financing.
[3] Acquired Lincoln First Banks (1983 rank: No. 80) on July 1, 1984.
[4] Name changed from Mellon National Corp., September 30, 1984.
[5] Company is 57% owned by Midland Bank (No. 14 among the 1983 Largest Commercial Banking Companies Outside the U.S.).
[6] Company is 51% owned by the Hongkong & Shanghai Banking Corp. (No. 22 among the 1983 Largest Commercial Banking Companies Outside the U.S.).
[7] Formed by merger of Mercantile Texas Corp. (1983 rank: No. 28) and Southwest Bancshares (1983 rank: No. 37) on October 10, 1984.

NET INCOME		STOCKHOLDERS' EQUITY		NET INCOME AS PERCENT OF EQUITY		EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
									1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
$ THOUSANDS	RANK	$ THOUSANDS	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
890,000	1	6,426,000	1	13.8§	41	6.45	6.48	2.54	9.77	42	9.80	64	8.07	86
345,525	5	5,118,511	2	6.8	91	1.77	2.18	1.86	(0.49)	87	(5.29)	84	6.75	87
405,818	3	3,961,044	3	10.1§	77	9.01	10.96	5.64	4.80	78	12.97	58	13.29	76
352,509	4	3,287,447	5	10.7	72	7.12	8.37	4.30	5.17	77	4.70	70	10.73	80
537,600	2	3,734,000	4	14.4	27	6.07	5.26	2.17	10.83	35	22.45	39	9.29	82
340,775	6	2,544,731	6	13.4	45	6.48	6.33	2.68	9.21	50	25.49	33	18.62	53
291,022	8	1,962,917	9	14.8	23	3.96	3.61	0.95	15.37	10	5.67	69	24.92	13
276,340	9	2,277,527	7	12.1	58	6.16	5.76	2.36	10.07	40	8.86	66	21.39	29
306,814	7	2,104,328	8	13.9§	37	9.52	8.55	3.38	10.91	34	26.76	28	21.11	36
86,369	31	1,924,159	10	4.5	96	1.19	3.92	2.65	(7.69)	90	(10.56)	88	8.16	85
158,544	13	1,499,486	12	9.9§	79	5.64	7.44	2.94	6.71	71	(3.24)	82	15.90	68
(1,087,732)	100	1,737,066	11	—		(26.99)	2.63	2.75	—		(69.14)	94	(1.46)	89
169,265	11	1,343,670	13	12.6	53	6.85	6.03	2.39	11.10	31	24.38	36	20.05	46
131,107	16	1,112,106	20	11.8	63	4.15	4.23	1.90	8.10	62	3.65	75	10.21	81
(324,442)	99	1,143,892	18	—		(15.93)	(0.63)	2.40	—		6.43	68	12.72	77
164,054	12	1,185,444	14	13.8	38	8.35	7.40	2.95	10.98	33	3.38	73	16.28	66
106,451	23	1,009,330	22	9.5§	80	5.01	4.85	3.20	4.58	79	21.41	41	14.00	75
117,900	19	1,160,000	17	10.2	75	1.76	(2.82)	1.24	3.56	81	(34.74)	93	0.93	88
137,341	15	1,134,195	19	12.1	59	5.15	4.60	2.08	9.47	44	(5.21)	83	15.55	70
69,500	39	1,160,100	16	6.0	94	1.90	4.05	2.13	(1.14)	89	(26.25)	92	8.60	84
183,000	10	1,168,000	15	15.7	16	5.64	5.50	1.35	15.33	11	(2.31)	81	14.04	74
107,700	21	1,081,000	21	10.0	78	3.56	3.98	1.10	12.42	23	(17.42)	90	14.54	72
98,112	27	878,429	25	11.2	70	5.11	4.86	2.19	8.84	54	28.47	24	21.23	33
81,038	33	978,505	23	8.3	85	1.97	1.23	1.35	3.85	80	(15.65)	89	10.87	79
119,225	17	804,338	28	14.8	24	4.07	3.68	1.05	14.51	15	35.32	12	22.39	25
107,520	22	760,262	29	14.1	31	6.40	5.70	2.84	8.46	58	14.17	53	18.90	51
143,172	14	926,849	24	15.5	20	6.51	5.66	2.19[8]	11.51	29	12.93	59	21.67	28
94,523	29	855,501	26	11.1	71	7.90	6.75	3.75	7.72	66	18.95	46	20.46	42
103,436	25	668,496	32	15.5	19	5.48	4.61	1.32	15.30	12	15.78	50	25.74	8
96,530	28	826,440	27	11.3§	69	5.49	5.47	1.69	12.48	22	12.55	60	25.66	9
65,895	40	539,266	39	11.9§	61	5.45	4.26	2.49	8.16	60	29.46	21	17.01	62
85,673	32	607,982	34	14.1	33	7.06	7.27	3.26	8.04	63	19.82	44	19.66	47
64,127	43	517,431	41	12.4	55	3.30	3.01	1.70	6.85	70	10.86	63	16.34	65
104,480	24	567,592	36	16.9§	7	6.30	5.70	2.26	10.77	36	48.52	5	23.87	17
56,896	50	491,456	46	11.6	67	4.81	4.39	2.71	5.90	76	18.52	47	20.14	45
118,782	18	569,854	35	20.8	3	2.89	2.55	0.49	19.36	4	(19.00)	91	—	
64,940	42	556,048	38	11.7	66	2.95	3.08	1.20	9.41	45	19.15	45	20.91	38
107,973	20	668,787	31	16.1	13	2.88	2.55	0.84	13.13	19	13.52	56	22.74	22
41,199	67	514,228	42	8.0	88	N.A.	4.71	4.51	—		—		—	
60,440	46	475,186	48	12.7	51	3.60	2.72	1.23	11.31	30	21.33	42	19.28	49
40,062	68	504,334	44	7.9	89	N.A.	N.A.	N.A.	—		—		—	
100,301	26	566,345	37	17.7	5	3.11	2.63	1.03	11.68	27	31.53	17	23.31	21
80,244	34	506,293	43	15.9	15	4.73	4.12	1.94	9.32	48	8.29	67	23.43	20
72,435	37	440,546	50	16.4	10	2.26	1.89	0.32	21.59	2	39.44	8	16.98	63
44,404	59	476,364	47	9.3	82	N.A.	N.A.	N.A.	—		—		—	
77,254	36	643,154	33	12.0	60	4.75	4.55	2.15	8.23	59	12.38	61	21.13	35
61,386	44	444,440	49	13.8	39	3.13	2.45	0.94	12.81	20	26.86	27	26.22	6
(132,844)	98	292,972	75	—		N.A.	N.A.	N.A.	—		—		—	
60,127	47	524,599	40	11.5	68	3.05	2.66	1.30	8.88	53	25.30	34	17.79	57
80,024	35	495,835	45	16.1	14	4.33	3.59	1.10	14.65	14	28.49	23	29.16	2

[8] Figure is for Pittsburgh National.

[9] Acquired BancOhio (1983 rank: No. 55) on November 9, 1984.

[10] Acquired Fidelity Union Bancorp. (1983 rank: No. 87) on April 5, 1984.

[11] Company is owned by Bank of Montreal (No. 32 among the 1983 Largest Commercial Banking Companies Outside the U.S.).

[12] Company is wholly owned by Standard Chartered Bank PLC (No. 39 among the 1983 Largest Commercial Banking Companies Outside the U.S.).

[13] Company is wholly owned by six European banks, all of which are ranked on FORTUNE's list of the Largest Commercial Banking Companies Outside the U.S.).

RANK 1984	RANK 1983	COMPANY	ASSETS[1] $ THOUSANDS	DEPOSITS $ THOUSANDS	DEPOSITS RANK	LOANS[2] $ THOUSANDS	LOANS RANK	EMPLOYEES NUMBER	EMPLOYEES RANK
51	61	**Maryland National Corp.** (Baltimore)	7,285,948	4,373,519	71	4,880,735	47	5,016	59
52	50	**Northern Trust Corp.** (Chicago)	7,225,286	4,904,426	55	3,355,578	68	4,472	64
53	52	**Midlantic Banks** (Edison, N.J.)	7,176,756	5,755,454	47	4,236,578	53	5,072	57
54	59	**First Atlanta Corp.**	7,003,362	4,811,823	60	3,924,432	57	5,203	53
55	54	**CBT Corp.** (Hartford)	6,862,174	4,904,374	56	3,681,282	59	5,803	44
56	58	**AmeriTrust Corp.** (Cleveland)	6,8[illegible]5,074	4,809,299	61	4,087,723	54	3,626	79
57	46	**Michigan National Corp.** (Bloomfield Hills)	6,769,320	5,892,4[illegible]0	46	4,931,791	45	7,000	37
58	57	**Bank of New England Corp.** (Boston)	6,754,920	5,437,159	51	4,627,373	48	4,550	61
59	60	**Shawmut Corp.** (Boston)	6,508,850	4,843,753	59	3,695,405	58	5,177	54
60	56	**Manufacturers National Corp.** (Detroit)	6,216,421	5,066,192	52	3,634,433	60	3,803	77
61	74	**Hartford National Corp.**	6,192,059	4,856,184	58	3,611,836	61	5,224	52
62	72	**Trust Co. of Georgia** (Atlanta)	6,165,079	4,612,235	64	3,357,866	67	5,270	51
63	66	**Texas American Bancshares** (Fort Worth)	6,032,489	5,021,904	53	4,327,140	51	3,598	82
64	62	**Fidelcor** (Philadelphia)	5,974,970	4,675,142	63	2,723,246	77	3,381	86
65	63	**Mercantile Bancorp.** (St. Louis)	5,944,105	4,478,494	66	3,486,867	63	4,034	70
66	65	**United Virginia Bankshares** (Richmond)	5,941,070	4,373,607	70	4,314,179	52	5,162	55
67	79	**Society Corp.** (Cleveland)	5,835,445	4,865,612	57	3,383,878	66	4,482	63
68	99	**Key Banks** (Albany, N.Y.)	5,620,490	4,706,422	62	3,192,785	72	5,719	45
69	64	**Huntington Bancshares** (Columbus, Ohio)	5,574,434	4,171,409	74	3,456,293	65	4,252	65
70	70	**First Wisconsin Corp.** (Milwaukee)	5,515,660	4,200,526	73	3,469,877	64	4,730	60
71	89	**Meridian Bancorp.** (Reading, Pa.)	5,494,282	4,579,396	65	3,183,451	73	3,726	78
72	96	**Florida National Banks of Florida** (Jacksonville)	5,357,198	4,376,130	69	3,175,605	74	5,479	48
73	69	**First Pennsylvania Corp.** (Philadelphia)	5,355,759	3,888,560	78	3,233,532	71	3,841	75
74	67	**Centerre Bancorp.** (St. Louis)	5,214,994	3,886,394	79	2,602,568	81	3,405	85
75	75	**BayBanks** (Boston)	5,179,872	4,417,929	68	3,276,919	70	5,125	56
76	73	**Riggs National Corp.** (Washington, D.C.)	5,119,825	4,170,211	75	1,939,778	98	1,899	98
77	71	**First Security Corp.** (Salt Lake City)	5,106,640	3,792,615	81	3,330,273	69	5,019	58
78	77	**Bank of Tokyo Trust** (New York)[15]	5,084,726	4,369,214	72	2,508,469	88	370	100
79	78	**California First Bank** (San Francisco)[16]	5,002,166	4,433,770	67	3,541,606	62	4,112	68
80	88	**First American Bankshares** (Washington, D.C.)	4,755,859	3,992,466	77	2,637,014	78	4,121	67
81	62	**State Street Boston Corp.**	4,744,223	3,211,030	90	1,525,125	100	3,971	71
82	76	**First Tennessee National Corp.** (Memphis)	4,658,013	3,644,068	83	2,559,727	87	4,049	69
83	100	**Commerce Bancshares** (Kansas City, Mo.)	4,615,922	3,819,760	80	2,216,182	92	3,883	73
84	86	**Dominion Bankshares** (Roanoke, Va.)	4,316,685	3,174,841	92	2,792,495	75	3,303	88
85	94	**AmSouth Bancorp.** (Birmingham, Ala.)	4,281,879	3,218,576	89	2,596,657	83	3,616	80
86	81	**First of America Bank Corp.** (Kalamazoo, Mich.)	4,260,634	3,755,059	82	2,589,965	85	3,849	74
87	90	**Third National Corp.** (Nashville)	4,230,578	3,507,018	85	2,579,427	86	3,040	89
88	83	**United Banks of Colorado** (Denver)	4,214,808	3,254,894	88	2,614,027	79	3,336	87
89	•	**Continental Bancorp** (Philadelphia)	4,159,588	3,563,820	84	2,598,538	82	2,949	93
90	85	**Bank of Virginia Co.** (Richmond)	4,134,327	3,116,245	95	2,612,305	80	3,021	90
91	93	**First Maryland Bancorp.** (Baltimore)	4,108,444	2,898,421	99	2,590,427	84	3,593	83
92	91	**American Security Corp.** (Washington, D.C.)	4,079,803	3,145,781	93	2,006,015	97	1,439	99
93	•	**South Carolina National Corp.** (Columbia)	4,077,619	2,969,553	98	2,311,728	89	3,942	72
94	95	**United Jersey Banks** (Princeton)	4,050,785	3,207,655	91	2,225,999	91	3,009	91
95	92	**Old Kent Financial Corp.** (Grand Rapids, Mich.)	4,024,462	3,423,112	86	2,037,658	96	3,000	92
96	98	**First American Corp.** (Nashville)	3,963,349	3,141,722	94	2,303,232	90	2,705	96
97	•	**Marshall & Ilsley Corp.** (Milwaukee)	3,958,438	2,825,953	100	1,938,857	99	3,472	84
98	•	**Bancorp Hawaii** (Honolulu)	3,852,002	3,352,774	87	2,150,837	93	2,901	94
99	•	**Landmark Banking Corp. of Florida** (Fort Lauderdale)	3,758,760	3,102,282	96	2,062,796	94	3,834	76
100	•	**First Florida Banks** (Tampa)	3,751,058	3,000,458	97	2,047,090	95	2,849†	95
		TOTALS	1,569,380,099	1,101,485,510		1,008,369,262		895,770	

• Not on last year's list.
N.A. Not available.
† Average for the year; see the reference to "employees" on page 200.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[14] Figure is for American Bank & Trust.

[15] Company is wholly owned by Bank of Tokyo Ltd. (No. 12 among the 1983 Largest Commercial Banking Companies Outside the U.S.).

[16] Company is 76% owned by Bank of Tokyo Ltd.

NET INCOME		STOCKHOLDERS' EQUITY		NET INCOME AS PERCENT OF EQUITY		EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
									1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
$ THOUSANDS	RANK	$ THOUSANDS	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
49,032	53	364,159	56	12.9§	50	6.01	4.69	2.52	9.08	51	31.83	16	17.59	59
22,408	93	352,648	63	6.4	93	4.06	3.76	4.43	(0.87)	88	2.87	78	11.97	78
65,035	41	387,267	52	16.8	8	4.09	4.01	1.44	10.98	32	28.70	22	25.88	7
60,466	45	352,751	62	17.1	6	2.21	1.98	0.46	16.99	6	22.57	38	28.91	3
46,223	56	326,960	68	14.1	32	5.32	4.45	2.43	8.15	61	33.23	13	20.16	44
70,366	38	672,220	30	10.5	74	7.54	5.49	4.22	5.98	75	24.86	35	18.07	56
21,437	95	361,955	59	5.9	95	1.81	(0.57)	1.90	(0.46)	86	4.48	71	15.29	71
46,274	55	339,384	65	13.6§	44	9.35	7.64	2.49	14.15	16	32.41	15	26.23	5
44,352	60	350,586	64	12.7	52	4.69	3.57	1.69	10.72	37	14.29	52	20.53	41
38,392	71	328,039	67	11.7	65	7.35	6.66	4.03	6.18	74	26.33	30	20.96	37
58,594	48	362,678	57	16.2	12	3.80	3.83	1.86	7.41	67	11.67	62	20.88	39
89,205	30	415,376	51	21.5	2	3.67	3.04	0.65	18.96	5	4.04	72	25.38	11
42,974	63	364,415	55	11.8	62	4.06	3.65	2.02	7.22	68	(7.69)	86	19.01	50
42,363	65	269,792	81	14.4§	28	7.42	8.79	3.99	6.40	73	23.48	37	15.68	69
46,055	57	373,881	53	12.3	56	4.70	4.47	2.40	6.95	69	30.42	18	17.51	60
57,344	49	362,511	58	15.5§	18	4.66	4.23	1.24	14.11	17	16.14	49	25.19	12
43,617	62	354,785	60	12.3	57	5.43	4.53	2.36	8.67	57	26.72	29	22.42	24
50,770	52	364,505	54	13.9	36	3.30	2.81	1.35	9.32	46	26.23	31	21.30	32
43,662	61	317,546	70	13.8	42	4.74	2.78	1.72	10.67	38	39.38	9	24.46	15
31,888	84	314,682	71	10.1	76	3.40	3.78	0.51	20.77	3	27.24	26	23.75	18
41,337	66	283,062	76	14.0§	35	5.76	4.72	2.68[14]	7.95	65	29.76	20	14.32	73
42,634	64	302,772	73	14.1	34	3.37	3.52	1.06	12.26	24	30.13	19	23.62	19
30,081	87	330,944	66	9.1	83	0.56	(1.10)	2.73	(14.65)	92	(9.43)	87	(2.96)	90
23,291	91	305,324	72	7.6	90	3.05	2.74	2.28	2.95	83	13.52	55	17.16	61
37,214	74	280,550	77	13.3	46	5.88	5.09	2.48	8.99	52	17.22	48	21.17	34
26,896	89	229,332	96	11.7	64	4.49	3.90	3.19	3.46	82	3.09	77	16.10	67
23,127	92	352,884	61	6.6	92	1.90	1.75	1.77	0.71	85	(1.30)	80	8.69	83
21,962	94	271,921	79	8.1	87	N.A.	N.A.	N.A.	—		—		—	
21,409	96	259,003	85	8.3	86	1.99	1.78	1.82	0.88	84	14.12	54	16.94	64
28,748	88	320,421	69	9.0	84	N.A.	N.A.	N.A.	—		—		—	
49,015	54	266,604	82	18.4	4	5.67	4.45	1.24	16.44	7	61.97	1	31.37	1
37,778	72	250,269	89	15.1	22	4.10	3.31	0.97	15.51	9	28.45	25	22.69	23
31,047	85	294,959	74	10.5	73	5.90	6.59	2.56	8.71	56	3.82	74	18.08	55
32,883	81	222,054	98	14.8	25	3.25	2.50	1.41	8.71	55	25.96	32	18.33	54
37,424	73	260,903	84	14.3	29	3.48	3.02	1.43	9.32	47	15.48	51	17.77	58
33,919	78	208,952	99	15.5§	17	4.58	3.47	1.15	14.79	13	53.77	2	—	
38,557	70	254,911	86	15.1	21	4.46	3.82	1.43	12.04	25	38.53	10	21.33	31
32,033	83	247,773	91	12.9	49	3.02	2.40	1.21	9.53	43	35.69	11	20.24	43
38,641	69	263,295	83	14.7	26	4.34	3.46	2.01	7.99	64	20.01	43	21.39	30
37,104	75	227,937	97	16.3	11	2.97	2.50	1.15	9.95	41	53.64	3	25.57	10
23,325	90	246,380	92	9.5	81	3.85	3.43	0.89	15.73	8	40.00	7	20.59	40
4,726	97	229,520	95	2.1	97	0.41	2.81	1.18	(10.01)	91	(6.00)	85	18.81	52
33,132	79	253,759	87	13.1	47	3.68	3.00	1.23	11.61	28	48.20	6	24.24	16
30,085	86	190,993	100	13.8§	40	4.32	3.65	1.42	11.77	26	3.22	76	22.20	26
45,058	58	271,395	80	16.6	9	3.50	2.54	0.98	13.53	18	52.02	4	—	
32,367	82	248,297	90	13.0	48	3.44	2.82	1.05	12.60	21	32.75	14	24.64	14
34,684	76	253,614	88	13.7§	43	6.62	6.53	2.74	9.22	49	9.32	65	21.89	27
33,045	80	230,724	94	14.3	30	3.77	3.70	1.42	10.27	39	13.36	57	19.62	48
34,023	77	273,620	78	12.4	54	1.38	1.63	0.74	6.43	72	(1.06)	79	—	
51,320	51	231,844	93	22.1	1	3.28	2.19	0.39	23.84	1	21.76	40	27.87	4
7,320,136		80,376,893												

THE 100 LARGEST DIVERSIFIED FINANCIAL COMPANIES

RANK 1984	RANK 1983	COMPANY	ASSETS[1] $ THOUSANDS	REVENUES[2] $ THOUSANDS	REVENUES RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
1	1	**Federal National Mortgage Assoc.** (Washington, D.C.)	88,338,214	9,083,761	5	(57,374)	97	1,309,129	13
2	3	**American Express** (New York)	61,848,000	12,895,000	4	610,000	1	4,407,000	1
3	2	**Aetna Life & Casualty** (Hartford)	51,028,300	15,411,000	1	127,700	14	4,073,200	3
4	4	**CIGNA** (Philadelphia)	39,035,000	14,775,300	2	102,700	18	4,538,000	2
5	5	**Travelers Corp.** (Hartford)	36,434,700	13,476,700	3	373,100	3	3,393,700	5
6	6	**Merrill Lynch** (New York)	30,839,931	5,937,302	6	95,340	21	2,078,712	7
7	7	**Financial Corp. of America** (Irvine, Calif.)	28,518,401	3,379,832	13	(590,493)	99	193,660	49
8	8	**First Boston** (New York)	25,396,491	863,831	48	79,629	25	463,069	32
9	9	**H.F. Ahmanson** (Los Angeles)	24,307,412	2,710,596	17	84,648**	33	940,146	20
10	10	**Great Western Financial** (Beverly Hills, Calif.)	23,884,602	2,840,573	14	99,510	19	1,031,703	17
11	11	**American General** (Houston)	19,197,496	5,363,284	9	488,237	2	3,386,003	4
12	13	**E.F. Hutton Group** (New York)	18,152,364	2,786,972	16	83,604	34	638,380	28
13	12	**CalFed** (Los Angeles)	17,698,383	2,061,907	21	68,010	27	906,819	21
14	•	**Philadelphia Saving Fund Society**	13,723,110	1,386,284	29	71,991	26	893,821	23
15	15	**Lincoln National** (Fort Wayne, Ind.)	12,604,107	4,748,085	11	150,491	11	1,616,074	11
16	14	**Loews** (New York)	12,856,902	5,603,384	7	330,640	4	2,087,040	8
17	16	**Transamerica** (San Francisco)	12,902,397	5,399,103	8	171,342	8	1,864,335	10
18	17	**American International Group** (New York)	11,634,903	4,380,990	12	301,640	6	2,833,494	6
19	19	**Student Loan Marketing Assoc.** (Washington, D.C.)	11,630,338	1,314,467	41	99,336	20	576,579	30
20	21	**Golden West Financial** (Oakland, Calif.)	10,619,724	1,085,106	34	83,716	23	315,773	39
21	23	**Paine Webber** (New York)§	10,496,833	1,583,406	28	13,019	52	334,328	38
22	18	**Continental** (New York)	9,881,689	4,641,347	10	304,516	5	1,935,143	9
23	22	**First Federal of Michigan** (Detroit)	9,479,334	1,007,689	36	30,116	43	223,337	44
24	20	**First Nationwide Financial** (San Francisco)	9,468,980	1,076,060	33	31,341**	41	340,176	37
25	30	**Gibraltar Financial Corp. of Calif.** (Beverly Hills)	9,372,723	937,679	39	33,468	40	199,147	48
26	26	**Home Federal Savings & Loan Assoc.** (San Diego)	8,886,583	880,957	41	62,723	31	633,134	29
27	29	**Imperial Corp. of America** (San Diego)	8,464,977	815,761	43	10,037	58	192,366	51
28	39	**Beneficial** (Wilmington, Del.)	7,720,900	1,904,600	26	106,300	17	867,000	24
29	27	**CityFed Financial** (Palm Beach, Fla.)§	7,594,860	957,036	38	68,730	28	313,340	40
30	25	**Kemper** (Long Grove, Ill.)	7,084,716	2,801,773	19	48,403	36	752,727	27
31	•	**Great American First Savings Bank** (San Diego)	6,720,100	708,933	46	23,300	45	345,863	36
32	•	**Columbia Savings & Loan Assoc.** (Beverly Hills, Calif.)	6,381,612	599,935	47	44,064	38	143,610	60
33	33	**Donaldson Lufkin & Jenrette** (New York)§	6,323,492	510,407	53	23,300	44	308,790	47
34	35	**U.S. Fidelity & Guaranty** (Baltimore)	6,157,390	2,839,404	15	4,321	74	1,102,720	14
35	34	**General Re** (Stamford, Conn.)	6,083,300	1,842,400	25	186,300	10	1,367,800	12
36	31	**Fleet Financial Group** (Providence)	5,747,484	739,540	45	68,029	29	417,934	34
37	36	**Capital Holding** (Louisville)	5,530,033	1,740,164	27	121,737	15	996,539	18
38	32	**St. Paul Companies**	5,336,881	3,339,141	18	(210,851)	98	968,692	19
39	37	**American Financial** (Cincinnati)	5,101,686	2,030,833	23	(42,360)‡	95	280,917	45
40	38	**Carteret Savings & Loan Assoc.** (Morristown, N.J.)§	5,048,670	508,299	50	7,331	63	133,979	64
41	41	**Florida Federal Savings & Loan Assoc.** (St. Petersburg)§	4,619,073	437,461	56	16,380	49	295,417	42
42	40	**Chubb** (Warren, N.J.)	4,370,006	2,033,884	22	82,999	24	894,810	22
43	46	**First Federal Sav. & Loan Assoc. of Arizona** (Phoenix)	4,360,590	516,138	52	19,049	47	171,419	55
44	48	**Western Savings & Loan Assoc.** (Phoenix)	4,142,902	441,586	55	13,139	51	86,468	72
45	47	**American Savings & Loan Assoc. of Florida** (Miami)§	4,045,397	395,065	58	18,390	48	180,734	58
46	44	**SAFECO** (Seattle)	3,884,283	1,942,178	24	139,970	16	1,060,607	15
47	43	**Reliance Group Holdings** (New York)	3,846,034	2,343,707	20	47,473	37	137,436	62
48	42	**United Financial Group** (Houston)	3,633,130	499,178	54	80,331	35	110,195	67
49	•	**Perpetual American Bank, F.S.B.** (McLean, Va.)§	3,572,000	361,772	61	(1,997)	85	173,849	54
50	•	**Washington Mutual Savings Bank** (Seattle)	3,550,237	387,083	59	(9,540)	90	178,628	53

• Not on last year's list.
N.A. Not available.
** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

‡ Reflects an extraordinary charge of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.
§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] Total assets shown as of December 31, 1984, unless otherwise noted. Only assets of consolidated subsidiaries are included. Holding companies engaged in commercial banking or life insurance are listed here only when assets of these businesses represent less than 50% of the companies' total.

NET INCOME AS PERCENT OF EQUITY		EMPLOYEES		EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
							1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
PERCENT	RANK	NUMBER	RANK	1984 $	1983 $	1974 $	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
—		1,342	51	(0.87)	1.15	2.30	—		(32.46)	59	2.96	47
13.2	30	76,447	1	2.79	2.53	1.09	9.80	27	19.25	21	15.83	31
3.1	75	41,000	4	1.04	3.31	1.93	(5.98)	36	8.73	26	14.33	34
1.4§	80	47,493	2	0.99	7.03	1.89*	(6.28)	37	7.20	30	11.83	40
11.3	38	39,997	6	4.43	3.72	1.21	13.81	18	23.37	16	20.11	22
4.6	69	42,200	3	1.00	2.68	0.52	7.07	29	(13.12)	51	21.43	19
—		6,000	28	(13.83)	3.13	(0.25)	—		(57.78)	67	41.73	1
17.3	15	2,709	41	6.22	6.43	1.03	19.33	9	23.63	8	34.84	7
5.8	63	6,063	27	1.96**	4.03	1.55	2.37	33	(10.33)	48	19.06	24
9.7	45	8,149	24	2.73	2.06	1.57	5.74	30	19.24	20	13.44	35
13.7§	27	13,770	11	3.27	3.33	0.48	21.24	7	18.79	23	29.47	9
8.3	50	16,842	10	2.08	4.42	0.32	20.33	8	(14.14)	53	37.24	3
7.6	54	3,726	29	2.87	N.A.	N.A.	—		(33.58)	55	—	
8.1	51	3,887	35	2.06	N.A.	N.A.	—		—		—	
9.3	46	12,164	14	3.40	4.10	1.83	6.38	28	34.69	14	19.07	23
16.4	20	22,700	8	4.03	4.10	0.47	24.06	4	41.92	4	36.09	4
9.2	49	30,000	5	2.64	3.12	0.61	15.78	15	(10.99)	50	22.06	16
10.7	42	23,600	7	4.06	3.36	0.95	15.61	16	6.73	31	18.12	22
17.3	14	681	80	1.91	1.37	N.A.	—		—		—	
26.5	5	2,313	45	4.85	3.75	0.57	21.73	6	7.96	29	24.44	14
3.8§	72	11,043	16	0.77	3.53	(0.08)	—		(19.71)	54	26.97	6
15.7	22	18,271	9	6.00	2.73	1.10 *	18.43	10	43.09	3	16.08	29
13.5	28	1,830	48	3.04	2.85**	N.A.	—		8.70	27	—	
9.3	48	2,725	40	2.10**	2.09	N.A.	—		(25.68)	57	—	
16.8	17	2,332	44	2.08	1.94	0.60	12.87	20	(8.43)	46	17.36	27
10.1	43	2,340	37	3.06	1.59	N.A.	—		27.30	6	—	
5.2	67	2,484	42	0.71	(2.40)	1.72	(8.47)	38	2.74	36	9.42	45
10.9§	41	7,762	25	4.02	3.96	3.82**	0.51	34	5.93	34	17.46	26
18.3§	11	5,173	31	4.17	3.80	N.A.	—		(9.44)	47	—	
6.4§	59	14,700	12	3.36	6.03	1.14	11.46	24	14.86	24	27.11	12
6.7	57	2,000	46	1.86	2.37	N.A.	—		33.06	9	—	
30.7	4	513	92	3.47	3.10	N.A.	—		—		—	
12.1	33	3,600	36	1.66	1.61	(1.48)	—		88.47	1	30.77	8
0.4	84	9,000	21	0.06	4.86	0.68	(19.30)	39	6.69	32	20.87	21
11.4	37	3,807	39	3.47	4.20	0.74	16.60	13	(4.83)	41	13.07	37
15.6§	23	4,782	34	3.89	3.45	0.36	26.70	3	34.92	13	27.90	11
12.3	32	8,329	23	4.37	4.23	1.64	10.30	26	19.81	18	9.79	44
—		9,832	20	(10.83)	6.46	(1.34)	—		(6.49)	42	10.92	42
—		5,500	30	N.A.	N.A.	N.A.	—		—		—	
6.1	60	1,475	54	1.05	N.A.	N.A.	—		(8.12)	45	—	
5.7	64	1,610	49	1.77	N.A.	N.A.	—		4.75	35	—	
9.3	47	8,400	22	4.36	4.31	(0.93)	—		19.00	22	14.84	33
11.1	40	1,471	55	3.00	1.00	N.A.	—		—		—	
15.2	24	1,384	56	1.29	6.03**	0.81	4.76	31	33.09	7	28.10	10
7.7§	52	783	77	1.45	2.37	N.A.	—		(33.33)	56	—	
11.3	39	10,400	18	3.35	3.74	0.43	23.71	5	34.83	15	17.88	25
13.3§	29	10,800	19	N.A.	N.A.	N.A.	—		—		—	
42.6	2	791	75	5.00	(0.29)	N.A.	—		37.93	5	—	
—		1,300	58	N.A.	N.A.	N.A.	—		—		—	
—		1,136	64	(1.54)	N.A.	N.A.	—		—		—	

† Total revenues during the year, including any consolidated nonfinancial revenues from manufacturing, retailing, etc., and revenues from discontinued operations when published. All companies on the list must have derived more than 50% of their revenues from financial businesses and have a publicly traded stock.

§ Figure is for Connecticut General.

* Figures are for fiscal year ended September 30, 1984.

** Formed as a holding company for City Federal Savings & Loan Assn., on December 19, 1984.

‡ Company is owned by Equitable Life Assurance Society of the United States (No. 3 on the Life Insurance list) January 17, 1985.

†† Figures are for fiscal year ended June 30, 1984.

‡‡ Figures are for fiscal year ended October 31, 1984.

RANK 1984	RANK 1983	COMPANY	ASSETS† $ THOUSANDS	REVENUES‡ $ THOUSANDS	RANK	NET INCOME $ THOUSANDS	RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	RANK
51	•	Howard Savings Bank (Newark)	3,948,682	387,131	60	10,300	57	230,573	46
52	•	Northeast Savings, F.A. (Hartford)‡	3,477,094	331,722	62	687	82	161,877	57
53	•	Atlantic Financial Federal (Bala Cynwyd, Pa.)*	3,373,300	307,749	70	6,421	65	110,371	63
54	45	Torchmark (Birmingham, Ala.)	3,196,809	1,127,876	32	131,879	12	811,918	26
55	•	CenTrust Savings (Miami)*	3,080,389	434,999	57	53,260	22	108,006	60
56	77	Homestead Financial (Burlingame, Calif.)	3,078,148	390,433	66	14,146	50	77,480	76
57	51	Financial Corp. of Santa Barbara (Calif.)	3,013,089	338,163	63	(19,881)	94	4,380	99
58	56	Citadel Holding (Glendale, Calif.)	3,044,079	294,117	68	6,880	64	90,343	70
59	53	Guarantee Financial Corp. of Calif. (Fresno)	3,043,300	280,600	72	3,943**	77	66,837	81
60	52	TRANSOHIO Financial (Cleveland)	2,797,304	283,960	71	6,303**	66	97,088	69
61	49	Farm & Home Savings Assn. (Nevada, Mo.)	2,777,708	290,604	65	6,010	68	160,799	56
62	50	Combined International (Northbrook, Ill.)	2,730,918	1,387,649	30	143,341	9	882,081	25
63	54	Valley Federal Savings & Loan Assn. (Van Nuys, Calif.)	2,630,806	290,349	67	(11,040)	91	74,460	77
64	•	Old Stone (Providence)	2,635,061	301,949	64	20,919**	46	134,683	52
65	55	American Savings & Loan Assn. (Salt Lake City)	2,573,477	375,096	74	(7,107)	89	85,636	73
66	67	First Columbia Financial (Englewood, Colo.)	2,499,040	288,930	69	6,123	67	30,913	88
67	68	Freedom Savings & Loan Assn. (Tampa, Fla.)	2,486,399	299,498	76	(15,918)**	93	36,443	97
68	•	Pacific First Federal Savings Bank (Tacoma, Wash.)	2,401,380	273,793	73	4,343**	73	198,680	50
69	•	Society for Savings (Hartford)	2,401,220	274,108	75	10,489**	56	141,383	61
70	•	Georgia Federal Bank, F.S.B. (Atlanta)	2,311,068	41,878	99	4,407**	72	121,718	59
71	57	Farmers Group (Los Angeles)	2,274,006	893,038	40	185,861	7	1,080,709	16
72	61	Downey Savings & Loan Assn. (Costa Mesa, Calif.)	2,232,784	230,684	78	12,184	54	48,814	91
73	65	Dallas Federal Financial Group (Dallas)*	2,195,600	230,700	79	(8,453)	86	61,844	86
74	62	Great Lakes Fed. Sav. & Loan Assn. (Ann Arbor, Mich.)	2,121,221	227,733	81	9,330**	59	78,773	75
75	50	Broadview Financial (Cleveland)	2,080,384	216,800	83	(12,404)**	92	28,727	98
76	64	Mercury Sav. & Loan Assn. (Huntington Beach, Calif.)	2,073,703	218,418	82	4,926**	70	36,423	95
77	68	Far West Financial (Newport Beach, Calif.)	2,000,335	238,805	77	12,776	52	66,373	82
78	71	Monarch Capital (Springfield, Mass.)	1,969,317	788,900	44	37,137	39	299,068	41
79	79	Bell National (San Mateo, Calif.)	1,934,315**	N.A.		N.A.		N.A.	
80	63	GEICO (Washington, D.C.)	1,907,343	994,071	37	181,313	10	488,401	30
81	69	Citizens Savings Financial (Miami)	1,906,676	220,307	80	7,030	61	31,876	96
82	88	Home Federal Savings & Loan Assn. (Tucson)	1,838,386	186,339	90	4,394	75	60,987	83
83	66	Ohio Casualty (Hamilton)	1,806,690	1,011,368	35	80,301	42	499,418	31
84	98	Security Capital (New York)*	1,704,899	188,039	84	10,837	55	66,888	84
85	•	Atlantic Federal Savings & Loan (Fort Lauderdale, Fla.)*	1,677,091	173,300	87	320	84	46,479	93
86	75	Fortune Financial Group (Clearwater, Fla.)*✓	1,595,884	175,433	85	4,109	76	73,071	78
87	77	American Family (Columbus, Ga.)	1,591,004	883,604	42	55,307	32	270,404	43
88	70	Sooner Federal Savings & Loan Assn. (Tulsa)*	1,553,380	173,781	86	3,140	80	70,736	79
89	•	First Federal S.&L. of South Carolina (Greenville)*	1,500,147	131,401	92	(3,403)	87	48,360	92
90	•	Boston Five Cents Savings Bank*	1,451,003	134,306	97	4,021	71	118,998	66
91	83	Metropolitan Fed. Sav. & Loan Assn. of Fargo (N.D.)	1,437,181	108,480	89	7,841**	60	61,893	85
92	80	Old Republic International (Chicago)	1,435,664	821,088	51	62,900	30	340,606	35
93	•	AmeriWest Financial (Albuquerque, N.M.)*	1,411,038	146,679	94	3,080	69	51,015	87
94	78	United First Fed. Sav. & Loan Assn. (Sarasota, Fla.)*	1,403,404	149,804	93	3,813	79	66,333	80
95	•	Home Federal Bank of Florida, F.S.B. (St. Petersburg)*	1,366,411	133,014	98	3,070	78	87,980	71
96	76	Orbanco Financial Services (Portland, Ore.)	1,366,384	160,886	88	(3,980)	88	81,040	74
97	85	First Southern Fed. Sav. & Loan Assn. (Mobile, Ala.)	1,365,635	127,040	96	1,080**	81	40,547	90
98	74	Alexander & Alexander Services (New York)	1,333,000	380,400	69	(99,600)	95	170,000	53
99	•	Landmark Savings Assn. (Pittsburgh)	1,309,040	130,301	95	441**	83	43,080	94
100	•	FirstSouth, F.A. (Pine Bluff, Ark.)*	1,275,360	158,480	91	7,575**	62	50,967	89
		TOTALS	944,345,880	170,801,718		6,904,600		60,280,017	

• Not on last year's list.
N.A. Not available.
** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

† Average for the year; see the reference to "employees" on page 200.
‡ Reflects an extraordinary charge of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating the figure.
* Figures are for fiscal year ended June 30, 1984.

NET INCOME AS PERCENT OF EQUITY		EMPLOYEES		EARNINGS PER SHARE			1974-84 GROWTH RATE		TOTAL RETURN TO INVESTORS 1984		1974-84 AVERAGE	
PERCENT	RANK	NUMBER	RANK	1984 $	1983 $	1974 $	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
4.7	68	1,300	63	1.86	N.A.	N.A.	—		—		—	
3.4	83	1,330	52	N.A.	N.A.	N.A.	—		—		—	
3.4	86	1,300	61	2.27	N.A.	N.A.	—		—		—	
16.3	21	6,300	26	3.33	2.64	1.01	12.27	22	50.41	2	12.99	38
80.8	1	1,074	65	36.66	N.A.	N.A.	—		—		—	
18.3	12	818	72	3.08	5.00	0.04	53.69	1	(32.64)	60	—	
—		644	84	(4.61)	(5.26)	0.77	—		(56.92)	66	6.27	46
7.6	53	634	86	2.13	2.11	N.A.	—		19.81	19	—	
6.0	62	1,286	59	0.45**	0.31‡	N.A.	—		(3.85)	39	—	
6.6	58	1,516	53	1.28**	1.41**	1.33	0.12	35	(3.90)	40	11.72	39
3.6	73	783	79	0.08	N.A.	N.A.	—		—		—	
19.7	8	13,400	13	4.93	3.33	1.44	13.07	19	(1.45)	38	26.18	13
—		1,000	67	(4.98)	0.17	N.A.	—		(46.54)	64	—	
16.8	18	1,386	55	3.86	2.89	1.37	10.91	25	11.30	25	—	
—		1,148	63	(3.88)	(3.79)	1.81	—		—		—	
13.0	34	1,044	66	2.49	0.91	N.A.	—		—		—	
—		1,318	60	(2.04)**	(10.06)	N.A.	—		(37.68)	62	—	
3.3	79	880	74	0.39	N.A.	N.A.	—		—		—	
7.4	55	780	78	2.40	N.A.	N.A.	—		—		—	
2.9	78	967	69	0.56	N.A.	N.A.	—		—		—	
17.7	13	13,799	15	3.48	4.06	1.15	16.93	11	22.50	17	15.95	30
28.1	6	751	78	3.58	0.76‡	0.56	16.44	14	(7.41)	44	22.31	17
—		709	76	(1.11)	N.A.	N.A.	—		—		—	
11.7	32	478	91	2.95**	1.43	N.A.	—		—		—	
—		448	88	(4.17)**	2.91	0.51	—		(42.24)	63	—	
13.9	26	990	68	1.80**	2.35	0.03	43.86	2	(34.25)	61	—	
19.6	10	480	88	6.31	2.80	(0.55)	—		(7.33)	43	21.12	20
12.8	35	1,993	47	4.34	3.49	1.37	11.96	23	29.61	12	24.01	15
—		N.A.		N.A.	2.55	0.08	—		(73.36)	68	—	
31.3	3	4,937	33	6.48	5.38	1.42	16.75	12	1.30	37	11.52	41
23.0	7	479	90	4.73	3.38**	N.A.	—		—		—	
6.7	56	507	93	1.88	2.73	N.A.	—		—		—	
6.1	61	3,133	38	3.40	4.48	1.95	3.30	32	8.07	28	17.24	28
16.6	19	836	71	1.66	1.33**	(0.22)	—		29.98	11	38.68	2
0.7	83	386	98	0.19	N.A.	N.A.	—		—		—	
5.6	65	583	89	1.71	N.A.	N.A.	—		(25.93)	58	—	
19.6§	9	2,303	43	2.76	1.58	0.66	15.44	17	31.00	10	36.01	5
2.8	77	416	93	1.03	0.20‡	N.A.	—		(51.47)	65	—	
—		810	73	(3.99)	N.A.	N.A.	—		—		—	
4.1	71	388	97	1.84	N.A.	N.A.	—		—		—	
13.8	23	480	97	3.73	4.10	N.A.	—		—		—	
17.1§	16	2,984	38	3.29	4.40	1.64	12.42	21	(10.82)	49	21.85	18
9.7	46	641	85	N.A.	N.A.	N.A.	—		—		—	
4.3	70	474	94	0.93	N.A.	N.A.	—		—		—	
3.3	74	337	91	N.A.	N.A.	N.A.	—		—		—	
—		1,310	57	(1.38)	(3.29)	1.35	—		(13.43)	52	13.19	36
3.1	75	370	98	0.50**	(1.46)	N.A.	—		—		—	
—		10,600†	17	(1.86)	0.03	0.88	—		6.21	33	18.42	43
1.0	81	383	99	0.39	N.A.	N.A.	—		—		—	
14.8	25	479	95	3.07**	N.A.	N.A.	—		—		—	
		646,040										

§ Formed as a holding company for [illegible] Federal Savings & Loan Assn., February 7, 1984.

† As of September 30, 1984.

‡ Formed as a holding company for Fortune Federal Savings & Loan Assn., February 17, 1984.

THE 50 LARGEST LIFE INSURANCE COMPANIES

RANK 1984	RANK 1983	COMPANY	ASSETS[1] $ THOUSANDS	PREMIUM AND ANNUITY INCOME[2] $ THOUSANDS	PREMIUM AND ANNUITY INCOME[2] RANK	NET INVESTMENT INCOME $ THOUSANDS	NET INVESTMENT INCOME RANK
1	1	**Prudential** (Newark) *	78,924,398	15,082,208	1	4,898,424	2
2	2	**Metropolitan** (New York) *	67,353,970	7,410,470	2	5,467,822	1
3	3	**Equitable Life Assurance** (New York) *	44,531,485	1,913,326	10	2,665,915	4
4	4	**Aetna Life** (Hartford)[7]	33,970,737	3,080,153	5	2,671,184	3
5	5	**New York Life** *	25,399,526	1,083,075	21	2,007,127	5
6	6	**John Hancock Mutual** (Boston) *	24,671,322	2,347,684	7	1,450,041	8
7	7	**Travelers** (Hartford)[8]	23,301,833	4,055,026	3	1,941,242	6
8	8	**Connecticut General Life** (Bloomfield)[9]	19,234,102	3,608,308	4	1,294,471	9
9	9	**Teachers Insurance & Annuity** (New York)	19,204,699	1,752,423	11	1,918,035	7
10	10	**Northwestern Mutual** (Milwaukee) *	15,895,616	2,142,824	8	1,172,318	10
11	11	**Massachusetts Mutual** (Springfield) *	13,448,693	1,603,273	13	1,064,226	11
12	12	**Bankers Life** (Des Moines) *	12,717,242	2,351,278	6	1,058,408	12
13	13	**Mutual of New York** *	9,538,770	1,331,888	15	699,009	15
14	14	**New England Mutual** (Boston, Mass.) *	9,304,789	1,914,311	9	799,562	13
15	15	**Mutual Benefit** (Newark) *	8,349,612	996,218	24	715,728	14
16	16	**Connecticut Mutual** (Hartford) *	7,289,748	1,046,621	22	583,122	16
17	17	**State Farm Life** (Bloomington, Ill.)	5,668,911	1,034,576	23	478,385	17
18	●	**Southwestern Life** (Dallas)[10]	4,648,220	431,288	38	148,010	50
19	18	**Lincoln National Life** (Fort Wayne, Ind.)[11]	4,622,326	1,227,331	14	324,576	21
20	21	**Nationwide Life** (Columbus, Ohio)	4,434,642	483,975	36	248,707	27
21	19	**Continental Assurance** (Chicago)[12]	4,414,547	1,278,866	17	171,534	46
22	25	**Variable Annuity Life** (Houston)	4,351,130	581,443	35	381,521	19
23	27	**Executive Life** (Los Angeles, Calif.)	4,212,996	683,612	30	421,367	18
24	26	**IDS Life** (Minneapolis)[13]	4,175,347	798,809	28	339,300	20
25	22	**Phoenix Mutual** (Hartford) *	4,008,432	664,199	31	282,026	23
26	20	**Penn Mutual** (Philadelphia) *	3,872,141	323,947	47	263,128	26
27	29	**Aetna Life & Annuity** (Hartford)[7]	3,703,674	630,945	33	197,760	41
28	28	**Pacific Mutual** (Newport Beach, Calif.) *	3,700,266	934,659	25	291,884	22
29	23	**National Life & Accident** (Nashville)[14, 15]	3,665,724	399,380	41	273,488	24
30	24	**Western & Southern Life** (Cincinnati) *	3,389,995	395,315	42	225,535	34
31	35	**Union Mutual** (Portland, Me.) *	3,144,810	647,740	32	273,028	25
32	31	**State Mutual of America** (Worcester, Mass.) *	3,069,484	718,181	29	232,102	33
33	41	**Northwestern National** (Minneapolis)	3,060,576	1,141,562	20	148,540	49
34	32	**Franklin Life** (Springfield, Ill.)[16]	3,049,156	383,389	44	243,346	28
35	30	**American National** (Galveston, Tex.)	2,971,870	409,808	39	212,043	39
36	34	**National Life** (Montpelier, Vt.) *	2,911,349	337,194	46	197,468	42
37	36	**Minnesota Mutual Life** (St. Paul) *	2,839,714	593,473	34	208,692	40
38	33	**Transamerica Occidental Life** (Los Angeles)[17]	2,837,348	1,304,580	16	184,028	44
39	38	**General American Life** (St. Louis) *	2,793,411	873,297	27	238,176	30
40	37	**Guardian of America** (New York) *	2,783,615	1,167,187	19	234,081	32
41	●	**New York Life Insurance & Annuity** (Wilmington, Del.)[18]	2,547,885	1,176,677	18	236,079	31
42	42	**United of Omaha Life**	2,530,732	391,816	43	223,127	36
43	39	**National Investors Pension** (Little Rock)	2,494,816	(43)	50	238,769	29
44	47	**Kemper Investors Life** (Chicago)[19]	2,426,906	402,434	40	216,434	38
45	●	**Transamerica Life & Annuity** (Los Angeles)[17]	2,380,083	1,635,533	12	224,646	35
46	44	**Provident Life & Accident** (Chattanooga, Tenn.)	2,336,109	894,579	26	167,683	47
47	40	**Capitol Life** (Denver)	2,325,303	375,024	45	220,266	37
48	48	**Mutual of America Life** (New York)* [20]	2,311,468	296,961	48	187,600	43
49	43	**Home Life** (New York) *	2,286,322	480,666	37	175,986	45
50	45	**Provident Mutual** (Philadelphia) *	2,268,958	290,562	49	155,318	48
		TOTALS	525,451,251	75,578,972		38,643,294	

Data for all companies are on the statutory accounting basis required by state insurance regulatory authorities.
● Not on last year's list.
N.A. Not available.
* Indicates a mutual company.

[1] As of December 31, 1984.

[2] Includes premium income from life, accident, and health policies, annuities, and from contributions to deposit administration funds.

[3] After dividends to policyholders and federal income taxes, excluding capital gains and losses. Figures in parentheses indicate a loss.

[4] Face value of all life policies as of December 31, 1984.

[5] Change between December 31, 1983, and December 31, 1984.

[6] Includes home office, field force, and full-time agents.

[7] Wholly owned by Aetna Life & Casualty (No. 3 on Diversified Financial list).

[8] Wholly owned by Travelers Corp. (No. 5 on Diversified Financial list).

[9] Wholly owned by CIGNA (No. 4 on Diversified Financial list).

NET GAIN FROM OPERATIONS[3]			LIFE INSURANCE IN FORCE[4]		INCREASE IN LIFE INSURANCE IN FORCE[5]				EMPLOYEES[6]	
$ THOUSANDS	RANK MUTUAL	RANK STOCK	$ THOUSANDS	RANK	$ THOUSANDS	RANK	PERCENT	RANK	NUMBER	RANK
219,290	2		532,990,221	1	23,026,700	2	4.5	29	58,398	1
433,181	1		464,761,946	2	13,853,061	4	3.1	34	38,000	3
75,414	5		248,211,312	3	9,785,623	8	4.1	31	21,408	4
314,469		1	204,636,320	4	5,902,221	19	3.0	35	16,838	9
209,256	3		179,184,906	5	7,134,352	13	4.2	30	19,746	5
186,899	4		158,669,592	6	5,477,860	21	3.6	32	19,562	7
136,088		5	137,206,481	7	6,941,317	15	5.3	27	43,800	2
314,179		2	110,027,340	10	5,222,996	22	5.0	28	10,609	11
159,884		4	13,659,743	43	1,115,737	33	8.9	21	2,276	41
60,860	6		107,564,490	11	14,942,109	3	16.1	9	7,490	17
58,642	7		65,416,607	14	3,842,013	24	6.2	25	10,881	12
48,882	8		59,421,398	16	7,169,621	12	13.7	11	7,781	15
5,901	23		51,362,807	19	(185,667)	44	—		7,680	16
22,233	14		45,979,229	24	5,062,621	23	12.4	16	9,115	14
35,716	11		53,225,890	18	1,419,004	31	2.7	39	4,689	24
34,988	12		43,876,979	25	3,625,614	25	9.0	20	6,038	21
82,682		9	82,889,829	12	9,201,881	9	12.5	15	17,667	8
17,161		18	68,257,746	13	57,617,278	1	—		4,445	25
128,133		6	114,225,107	9	10,711,468	7	10.4	19	4,159	28
36,689		13	16,346,695	38	440,648	38	2.8	38	6,702	19
61,868		11	46,725,234	22	11,493,734	6	32.6	2	N.A.	
5,367		20	3,973	49	(109)	42	—		1,876	45
2,419		21	27,904,946	28	6,221,934	17	28.7	3	800	47
28,542		15	13,729,209	42	979,370	35	7.7	23	4,942	22
21,469	15		55,393,928	17	6,392,390	16	13.1	14	3,485	33
9,712	19		22,280,474	31	633,656	36	2.9	36	3,377	34
(36,483)		24	15,054,235	40	2,706,610	27	21.9	6	3,090	29
24,862	13		23,028,483	30	2,386,676	30	11.6	17	2,544	39
190,871		3	19,169,676	36	(516,758)	46	—		9,171	13
47,927	9		21,830,738	32	2,562,855	29	13.3	13	6,176	20
18,328	16		4,418,822	44	(516,861)	47	—		3,208	36
40,169	10		25,471,356	29	3,351,962	26	15.2	10	3,628	30
22,959		16	43,727,312	26	7,006,697	14	19.1	7	1,988	43
87,759		8	20,469,160	33	1,287,462	32	6.7	24	4,330	26
106,257		7	20,439,726	34	612,367	37	3.1	33	7,287	18
(9,510)	25		17,294,004	37	2,652,548	28	18.1	8	2,726	37
6,791	22		60,675,408	15	6,055,567	18	11.1	18	3,592	31
67,502		10	125,667,744	8	(25,016,817)	49	—		4,839	23
16,670	17		46,276,116	23	9,006,004	10	24.2	4	2,[illegible]08	42
9,994	18		47,828,771	20	9,008,894	11	23.2	5	3,500	32
(92,661)		25	16,313,318	39	11,671,483	5	—		19,746	6
17,604		17	39,120,223	27	(185,908)	43	—		12,354	10
(22,598)		23	—		—		—		—	
11,661		19	391,379	48	169,454	40	74.4	1	380	48
(4,434)		22	689,793	47	(234,678)	45	—		1,148	44
57,842		12	47,306,837	21	5,601,436	20	13.4	12	4,258	27
30,891		14	4,238,583	45	(2,694,739)	48	—		3,213	35
7,900	21		2,153,249	46	154,461	41	7.7	22	571	46
3,519	24		19,237,867	35	1,080,034	34	6.0	26	2,643	38
8,486	20		14,971,974	41	404,761	39	2.8	37	2,381	40
3,312,247			3,589,667,287		254,380,449				425,160	

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[10] Wholly owned by Tenneco (No. 19 on the FORTUNE 500).

[11] Wholly owned by Lincoln National (No. 15 on Diversified Financial list).

[12] Wholly owned by a subsidiary of Loews (No. 14 on Diversified Financial list).

[13] Wholly owned by American Express (No. 2 on Diversified Financial list).

[14] Wholly owned by American General (No. 11 on Diversified Financial list).

[15] Name changed to American General Life & Accident on January 1, 1985.

[16] Wholly owned by American Brands (No. 84 on the FORTUNE 500).

[17] Wholly owned by Transamerica (No. 17 on Diversified Financial list).

[18] Wholly owned subsidiary of New York Life Insurance Co.

[19] Wholly owned by Kemper (No. 30 on Diversified Financial list).

[20] Name changed from National Health & Welfare Mutual on January 1, 1984.

THE 50 LARGEST RETAILING COMPANIES

RANK 1984	RANK 1983	COMPANY	SALES[1] $ THOUSANDS	ASSETS $ THOUSANDS	ASSETS RANK	NET INCOME $ THOUSANDS	NET INCOME RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	STOCKHOLDERS' EQUITY RANK
1	1	**Sears Roebuck** (Chicago)[2]	38,828,000	57,072,300	1	1,454,800	1	10,910,900	1
2	2	**K mart** (Troy, Mich.)	21,095,980	9,261,739	3	499,096	2	3,233,792	3
3	3	**Safeway Stores** (Oakland, Calif.)[2]	19,642,201	4,837,229	6	165,011	16	1,469,023	9
4	4	**Kroger** (Cincinnati)[2]	15,922,091	3,667,326	11	156,633	18	1,148,776	14
5	5	**J.C. Penney** (New York)	13,451,000	8,170,000	4	435,000	3	3,812,000	2
6	9	**American Stores** (Salt Lake City)[2]	12,118,793	3,535,737	12	166,325	15	676,752	21
7	6	**Southland** (Dallas)[2]	12,034,871	3,339,772	13	160,383	17	1,195,687	12
8	7	**Federated Department Stores** (Cincinnati)	9,672,336	5,271,375	5	329,330	5	2,544,042	4
9	8	**Lucky Stores** (Dublin, Calif.)	9,236,339	1,801,739	23	94,631	26	609,442	25
10	10	**Household International** (Prospect Heights, Ill.)[2]	8,321,300	10,041,000	2	234,100	11	1,526,700	8
11	12	**Dayton Hudson** (Minneapolis)	8,009,000	3,799,850	10	259,346	10	1,736,502	6
12	11	**Winn-Dixie Stores** (Jacksonville, Fla.)[3]	7,302,269	1,188,765	29	115,916	23	608,673	26
13	17	**Wal-Mart Stores** (Bentonville, Ark.)	6,518,084	2,205,229	18	270,767	9	984,672	19
14	13	**Montgomery Ward** (Chicago)[2,4]	6,495,000	4,394,000	7	60,000	35	1,719,000	7
15	16	**F.W. Woolworth** (New York)	5,737,000	2,311,000	17	141,000	19	1,051,000	16
16	15	**BATUS** (Louisville)[2,7]	5,440,717	4,283,697	8	313,523	6	1,393,011	10
17	18	**Great Atlantic & Pacific Tea** (Montvale, N.J.)[2]	5,222,013	1,199,928	27	47,351	41	375,789	38
18	20	**May Department Stores** (St. Louis)	4,762,400	3,046,700	14	214,100	13	1,289,200	11
19	19	**Albertson's** (Boise)	4,735,724	1,032,876	34	79,746	33	484,419	30
20	21	**Melville** (Harrison, N.Y.)[2]	4,423,473	1,610,609	25	190,306	14	984,775	20
21	26	**Supermarkets General** (Woodbridge, N.J.)	4,344,600	985,809	36	52,424	40	287,410	43
22	22	**Associated Dry Goods** (New York)	4,106,445	2,084,434	21	120,687	22	985,469	18
23	27	**R.H. Macy** (New York)[2]	4,068,139	2,146,443	19	221,806	12	1,168,686	13
24	23	**Allied Stores** (New York)	3,970,469	2,675,642	16	140,783	20	1,063,230	15
25	24	**Carter Hawley Hale Stores** (Los Angeles)	3,724,294	1,947,286	22	89,670	28	348,166	39
26	29	**Marriott** (Bethesda, Md.)[2]	3,524,937	2,904,660	15	139,766	21	675,560	22
27	25	**Grand Union** (Elmwood Park, N.J.)[10]	3,438,848	576,176	46	(115,340)	50	137,142	47
28	30	**McDonald's** (Oak Brook, Ill.)[11]	3,366,893	4,229,638	9	389,089	4	2,009,199	5
29	28	**Stop & Shop Companies** (Boston)	3,247,290	932,318	37	54,845	37	388,830	37
30	32	**Publix Super Markets** (Lakeland, Fla.)[2]	3,206,134	667,226	44	75,323	34	416,546	34
31	34	**Zayre** (Framingham, Mass.)	3,123,008	1,100,089	31	80,316	32	468,071	29
32	31	**Wickes Companies** (Santa Monica, Calif.)	3,031,306	1,313,006	26	296,536**	7	340,133	41
33	36	**Walgreen** (Deerfield, Ill.)[11]	2,744,635	842,803	39	85,446	29	414,618	35
34	35	**Tandy** (Fort Worth)[2]	2,736,966	1,602,444	24	281,871	8	968,696	17
35	38	**Jack Eckerd** (Clearwater, Fla.)[2]	2,622,494	1,091,692	33	85,274	30	618,812	24
36	37	**Rapid-American** (New York)	2,342,915	2,122,768	20	(8,216)§	48	76,446	50
37	39	**Best Products** (Richmond, Va.)	2,232,606	1,178,424	28	13,409	46	419,146	33
38	42	**Revco D.S.** (Twinsburg, Ohio)[2]	2,227,510	777,216	42	93,411	27	447,126	31
39	40	**Transworld** (New York)[2]	2,001,935	1,136,836	30	115,039	24	680,163	23
40	41	**Giant Food** (Landover, Md.)[2]	1,987,435	478,700	48	48,511	44	193,383	44
41	45	**U.S. Shoe** (Cincinnati)	1,717,401	887,100	40	53,432	39	427,838	32
42	44	**Waldbaum** (Central Islip, N.Y.)[2]	1,711,932	335,987	49	13,038	47	128,432	48
43	43	**Mercantile Stores** (Wilmington, Del.)	1,706,904	996,588	35	84,760	31	594,377	27
44	50	**Toys "R" Us** (Rochelle Park, N.J.)	1,701,700	1,098,563	32	111,424	25	579,113	28
45	48	**Lowe's Companies** (North Wilkesboro, N.C.)	1,688,720	608,344	45	61,440	36	341,346	40
46	47	**Service Merchandise** (Nashville)[2]	1,606,992	866,700	38	44,576	42	308,595	42
47	46	**Brown Group** (St. Louis)[12]	1,571,600	693,238	43	54,060	38	400,211	36
48	●	**Food Lion** (Salisbury, N.C.)[2]	1,469,564	331,178	50	37,385	45	163,420	46
49	●	**SCOA Industries** (Columbus, Ohio)	1,433,613	508,566	47	41,027	43	178,652	45
50	49	**Evans Products** (Miami Beach, Fla.)[2]	1,406,399	808,220	41	(31,108)	49	112,713	49
		TOTALS	237,380,031	168,704,467		8,137,600		53,025,998	

● Not on last year's list.
N.A. Not available.
** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

† Average for the year; see the reference to "employees" on page 200.
§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] Net sales include operating revenues from non-retail activities and revenues from discontinued operations when they are published. All figures are for the fiscal year that ended January 31, 1985, unless otherwise noted. Sales of subsidiaries are included when they are consolidated. All companies on the list must have derived more than 50% of their revenues from retail operations.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
		SALES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
458,000	1	3.8	14	13.3	37	4.01	3.80	1.63	9.45	35	(9.90)	33	8.24	40
290,000	2	2.4	32	15.4	25	3.84	3.80	0.87	16.01	19	9.62	17	8.09	41
168,590	5	0.9	44	12.6	41	3.12	3.26	1.33	7.35	39	11.26	13	11.10	38
180,000	4	1.0	43	13.6	33	3.49	2.77	1.68	7.58	37	11.49	11	24.38	22
180,000	3	3.2	21	11.4	44	5.81	6.25	2.12	10.61	30	(14.02)	37	7.51	43
122,000	8	1.5	38	25.4§	4	5.71	3.61	0.45[3]	28.89	6	2.46	27	36.14	13
81,800	22	1.3	39	13.4	36	3.41	3.26	0.98	13.31	26	(12.70)	36	14.74	34
127,700	7	3.4	18	13.0	39	6.77	6.96	2.69	9.67	34	0.65	29	11.88	37
67,000	19	1.0	42	15.3§	27	1.84	2.05	1.04	5.88	40	0.85	28	16.09	30
78,000	14	2.8	26	15.3§	26	4.18	3.68	2.41	5.66	41	12.07	9	20.11	26
115,000†	11	3.2	20	14.9	28	2.48	2.54	0.39	21.18	13	3.37	26	37.03	10
69,000	18	1.6	37	19.0	15	2.33	2.72	1.08	10.44	31	16.00	7	15.47	32
81,000	12	4.2	12	27.5§	3	1.91	1.40	0.06	41.50	2	(2.39)	31	52.38	1
76,500†	13	1.1	41	4.0	46	N.A.	N.A.	N.A.	—		—		—	
117,000	10	2.5	30	13.4	35	4.45	3.72	2.15	7.55	38	10.46	16	22.15	25
89,200†	23	5.5	6	22.5	7	N.A.	N.A.	N.A.	—		—		—	
53,000	25	0.9	45	12.7	40	1.27	0.83	0.49	9.99	33	30.61	3	8.36	39
75,000	15	4.5	9	16.0§	23	4.96	4.32	1.37	13.74	25	10.76	14	19.97	28
34,000	32	1.7	36	17.6	21	2.42	2.15	0.46	18.00	18	9.35	18	28.36	18
73,231	16	4.3	10	19.9§	12	3.60	3.36	0.54	20.89	14	10.59	15	32.60	16
45,000	27	1.2	40	18.2	17	2.95	2.30	0.16	33.84	5	44.55	1	40.12	7
63,000	21	2.9	24	12.2	43	6.07	5.95	2.77	8.16	36	(8.49)	32	17.39	29
52,000†	26	5.5	7	19.0	16	4.37	3.72	0.62	21.52	11	(19.89)	38	35.13	14
64,000†	20	3.5	16	13.2§	38	6.71	6.15	2.19	11.82	28	7.85	20	26.26	20
56,000	24	2.4	31	18.0§	20	2.75	1.93	1.71	4.87	42	5.72	24	12.21	36
120,100	9	4.0	13	20.7	10	5.18	4.15	0.74	21.43	12	6.93	22	28.91	17
23,000	40	—		—		N.A.	N.A.	N.A.	—		—		—	
137,000†	6	11.6	1	19.4	13	4.39	3.83	0.76	19.24	16	11.45	12	15.82	31
39,000	29	1.7	35	14.1	31	4.50	4.73	1.22**	14.25	23	(11.20)	35	36.21	12
37,042	30	2.4	33	18.1	18	1.56	1.17	N.A.	—		—		—	
43,000†	28	2.6	28	17.2	22	3.99	3.19	0.05	54.04	1	14.09	8	46.22	4
25,000†	38	9.8	3	87.1	1	20.30**	1.72**	1.06	34.34	4	(41.03)	43	(4.39)	44
32,900†	34	3.1	22	20.6	11	2.78	2.28	0.29	25.47	8	19.63	6	39.15	8
34,000	33	10.3	2	28.5	2	2.75	2.67	0.12	36.78	3	(44.39)	44	45.79	5
36,300	31	3.3	19	13.8	32	2.27	1.91	0.83	10.6[illegible]	29	6.31	23	14.09	35
26,000	37	—		—		N.A.	N.A.	N.A.	—		—		—	
18,000	43	0.6	47	3.3	47	0.50	1.40	0.19	10.22	32	(31.97)	42	36.22	11
23,700	39	4.2	11	20.9	9	2.54	2.13	0.39	20.51	15	(28.10)	41	22.91	24
73,000	17	5.8	5	16.4§	24	3.14	(1.37)	(2.01)	—		7.89	19	23.22	23
15,700	45	2.1	34	21.0	8	2.77	2.53	0.50	18.77	17	29.28	4	38.68	9
28,000	35	3.1	23	12.5	42	2.42	3.41	0.62	14.59	22	(27.08)	40	32.71	15
7,500	50	0.8	46	10.1	45	2.41	2.58	0.62	14.60	21	25.32	5	26.97	19
19,500†	42	5.0	8	14.3	30	5.75	5.65	1.43	14.95	20	4.82	25	20.07	27
18,000	44	6.6	4	19.2	14	1.30	1.08	N.A.	—		7.29	21	—	
10,727	49	3.6	15	18.0	19	1.70	1.40	0.46	14.06	24	12.04	10	14.78	33
14,751	46	2.7	27	14.4	29	1.46	1.49	0.13	27.33	7	(25.86)	39	46.45	3
27,500	36	3.4	17	13.8	34	2.65	3.20	0.81	12.63	27	(10.10)	34	26.04	21
12,784	47	2.5	29	22.8	6	0.71	0.53	0.09	23.04	9	41.85	2	49.06	2
20,000	41	2.9	25	23.0	5	2.40	2.22	0.33	21.76	10	(2.04)	30	45.27	6
12,491	48	—		—		(2.58)	(5.00)	(2.45)	—		(61.84)	45	7.69	42
2,634,016														

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[1] Figures are for fiscal year ended December 31, 1984.
[3] Figure is for Skaggs.
[4] Acquired Jewel Stores (1983 rank: No. 14) on June 29, 1984.
[5] Figures are for fiscal year ended June 30, 1984.
[6] Wholly owned by Mobil (No. 3 on the FORTUNE 500).
[7] Wholly owned by BAT Industries (No. 26 among the Largest Industrial Corporations Outside the U.S.).
[8] Figures are for fiscal year ended February 29, 1984.
[9] Figures are for fiscal year ended July 31, 1984.
[10] Figures are for fiscal year ended March 31, 1984.
[11] Figures are for fiscal year ended August 31, 1984.
[12] Figures are for fiscal year ended October 31, 1984.

HE 50 LARGEST TRANSPORTATION COMPANIES

RANK		COMPANY	OPERATING REVENUES[1]	ASSETS		NET INCOME[2]		STOCKHOLDERS' EQUITY	
1984	1983		$ THOUSANDS	$ THOUSANDS	RANK	$ THOUSANDS	RANK	$ THOUSANDS	RANK
1	6	**Burlington Northern** (Seattle)	9,156,337	11,424,143	3	608,106	1	4,171,115	5
2	4	**CSX** (Richmond, Va.)	7,934,000	11,636,000	2	465,000	6	4,909,000	2
3	●	**Union Pacific** (New York)[3]	7,788,936	10,392,047	4	494,145	2	4,231,350	4
4	2	**UAL** (Elk Grove, Ill.)	6,967,599	5,159,042	7	282,388	10	1,889,761	6
5	3	**United Parcel Service** (Greenwich, Conn.)	6,832,845	3,287,791	9	476,506	5	1,640,071	7
6	1	**Santa Fe Southern Pacific** (Chicago)	6,661,800	11,648,700	1	490,800	3	5,768,500	1
7	5	**AMR** (Fort Worth)	5,353,721	5,260,896	6	233,880	11	1,638,407	8
8	7	**Eastern Air Lines** (Miami)	4,363,898	3,769,403	8	(37,927)	47	185,386	34
9	9	**Delta Air Lines** (Atlanta)[5]	4,263,731	3,268,822	10	175,604	13	1,048,907	9
10	8	**Pan American World Airways** (New York)	3,684,838	2,645,244	13	(206,836)	50	223,958	30
11	10	**Trans World Airlines** (New York)	3,656,599	2,878,887	12	29,885	31	729,402	14
12	11	**Norfolk Southern** (Norfolk, Va.)	3,524,589	8,667,184	5	482,213	4	4,472,553	3
13	12	**NWA** (St. Paul)[7]	2,444,974	1,754,233	18	55,964‡	24	892,923	11
14	●	**Sea-Land** (Edison, N.J.)	1,759,207	1,811,302	17	80,503	18	777,851	12
15	16	**Consolidated Freightways** (Palo Alto, Calif.)	1,704,909	1,060,574	28	74,465	19	552,836	18
16	15	**USAir** (Arlington, Va.)	1,629,696	1,620,723	19	121,643	14	737,264	13
17	13	**Republic Airlines** (Minneapolis)	1,547,232	1,084,909	27	29,511**	32	8,640	47
18	19	**Roadway Services** (Akron, Ohio)	1,461,510	912,965	32	100,015	17	577,950	17
19	23	**Federal Express** (Memphis)[9]	1,436,305	1,525,905	22	113,430	15	717,721	16
20	22	**Yellow Freight System** (Overland Park, Kans.)	1,380,042	666,380	37	44,103	28	280,070	28
21	20	**Texas Air** (Houston)	1,371,702	1,324,363	23	50,337**	25	(26,883)	49
22	18	**Leaseway Transportation** (Cleveland)	1,348,471	1,087,377	26	30,483	30	302,919	27
23	17	**Sohio Pipe Line** (Cleveland)[10]	1,309,384	2,908,664	11	384,293	8	57,836	44
24	24	**Piedmont Aviation** (Winston-Salem, N.C.)	1,282,879	1,188,772	25	58,175	23	336,636	24
25	14	**Tiger International** (Los Angeles)	1,209,890	1,026,728	29	(88,940)	49	1,961	48
26	21	**Western Air Lines** (Los Angeles)	1,181,885	803,595	35	(29,165)	45	62,467	43
27	27	**Exxon Pipeline** (Houston)[11]	1,025,196	2,007,599	14	399,180	7	498,558	20
28	25	**Illinois Central Gulf Railroad** (Chicago)[12]	1,020,542	1,939,146	16	62,353	21	1,013,370	10
29	30	**McLean Industries** (New York)	959,030	1,526,747	21	61,564	22	335,768	25
30	31	**American President Companies** (Oakland, Calif.)	926,174	986,939	30	103,460	16	505,833	19
31	26	**ARCO Pipe Line** (Independence, Kans.)[13]	901,217	1,999,711	15	293,191	9	719,935	15
32	28	**Chicago & North Western Transportation** (Chicago)	882,060	1,550,092	20	20,899	34	314,000	26
33	32	**Emery Air Freight** (Wilton, Conn.)	817,789	379,510	42	31,885	29	167,327	35
34	29	**Purolator Courier** (Basking Ridge, N.J.)	790,330	469,585	41	15,522	35	214,133	31
35	35	**PSA** (San Diego)	689,724	868,904	33	2,206	43	198,459	32
36	33	**Frontier Holdings** (Denver)	674,639	530,440	40	(31,108)	46	156,882	36
37	34	**BP Pipelines** (New York)[14]	624,099	1,323,073	24	216,084	12	(53,015)	50
38	●	**Minstar** (Glendale, Calif.)	598,071	362,241	43	23,205**	33	63,225	42
39	●	**People Express Airlines** (Newark, N.J.)	586,802	638,309	39	1,648	44	190,905	33
40	38	**Southwest Airlines** (Dallas)	535,948	646,244	38	49,724	26	361,768	23
41	36	**Arkansas Best** (Fort Smith, Ark.)	530,237	200,190	47	15,426**	36	79,334	38
42	39	**Allied Van Lines** (Broadview, Ill.)	516,258	75,936	50	7,762	41	28,753	45
43	43	**United Van Lines** (Fenton, Mo.)	509,883	95,761	49	2,890	42	24,916	46
44	42	**Kansas City Southern Industries** (Mo.)	500,404	854,416	34	49,084	27	401,944	22
45	45	**Mayflower** (Carmel, Ind.)	480,723	211,291	45	13,936	37	77,788	39
46	48	**Carolina Freight** (Cherryville, N.C.)	468,787	201,144	46	12,097	39	69,809	41
47	41	**Ozark Holdings** (St. Louis)[15]	465,716	345,809	44	12,704	38	122,803	37
48	37	**Alexander & Baldwin** (Honolulu)	463,212	786,569	36	66,590	20	442,564	21
49	49	**Airborne Freight** (Seattle)	417,854	165,732	48	10,829	40	76,440	40
50	44	**Chicago Milwaukee St. Paul & Pacific RR** (Chicago)	417,067	936,458	31	(66,186)	48	270,336	29
		TOTALS	107,088,741	117,916,395		5,895,526		42,470,626	

● Not on last year's list.

N.A. Not available.

** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

† Average for the year; see reference to "employees" on page [illegible].

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] Consolidated operating revenues include those from non-transportation activities and sales from discontinued operations when these are published. All figures are for the year that ended December 31, 1984, unless otherwise noted. All companies must derive more than 50% of their operating revenues from carrier operations and file public financial statements.

[2] Net income for all railroads has been calculated according to generally accepted accounting principles.

[3] Company was No. 40 on the 1983 FORTUNE 500.

[4] Figure is for Santa Fe Industries.

[5] Figures are for fiscal year ended June 30, 1984.

EMPLOYEES		NET INCOME AS PERCENT OF				EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
		OPERATING REVENUES		STOCKHOLDERS' EQUITY					1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
NUMBER	RANK	PERCENT	RANK	PERCENT	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
48,076	5	6.6	15	14.6§	21	7.15	5.40	1.66	15.71	9	(3.08)	19	20.04	14
60,000	4	5.9	19	9.2§	33	3.15	2.07	1.66	6.61	21	1.17	13	19.46	15
46,388†	7	6.3	17	11.7§	27	4.01	2.40	1.42	10.92	11	(16.12)	24	12.70	25
63,000†	3	4.1	25	1.3§	40	7.46	3.88	4.04	6.33	22	21.09	5	14.03	22
161,133	1	7.0	13	29.1	6	2.82	2.90	N.A.	—		—		—	
63,632	2	7.4	12	8.5	34	2.61	3.93	1.29[6]	7.31	19	1.90	12	18.24	17
46,900	6	4.4	27	13.6§	24	4.37	4.79	0.72	19.76	6	0.00	15	22.45	12
38,400	8	—		—		(1.53)	(7.19)	0.50*[7]	—		(36.54)	34	2.41	31
37,389	10	4.1	24	16.7	16	4.42	(2.18)	2.28	6.84	20	11.25	9	13.92	23
26,262	12	—		—		(2.00)	(0.58)**	(2.00)	—		(43.00)	37	8.74	28
27,320	11	0.8	41	2.1§	39	0.17	(0.99)‡	N.A.	—		(8.70)	23	—	
37,998†	9	13.7	6	10.8	29	7.66	5.67	3.61[6]	7.80	16	(2.06)	18	17.99	19
15,185	19	2.3	36	6.3	37	2.44‡	2.19	3.00	(2.04)	29	(7.09)	21	15.60	21
9,000	27	4.6	20	10.4	30	3.51	N.A.	N.A.	—		—		—	
20,600	13	4.4	23	13.5	25	2.81	2.42	1.13	9.54	13	(1.33)	17	24.56	7
12,524	23	7.5	11	16.5	17	4.92	3.49	0.91**	18.38	8	5.10	10	26.03	6
13,390	20	1.9	39	288.9§	2	0.76**	(4.28)	0.66[8]	1.42	26	43.33	3	11.38	26
20,200	15	6.8	14	17.3	13	2.49	2.47	0.82	11.78	10	(8.44)	22[9]	11.20	27
18,368†	17	8.0	10	16.0§	18	2.52	2.03	N.A.	—		(25.41)	31	—	
20,450	14	3.2	29	15.8	19	3.10	3.46	1.69	6.25	23	(23.35)	28	7.48	29
12,700	21	3.7	28	—		2.21**	(14.58)	0.08**	39.36	1	37.74	4	24.32	8
18,000†	18	2.3	37	10.1	32	2.55	3.12	1.48	5.58	24	(20.51)	27	18.84	16
175	49	29.4	4	664.5	1	N.A.	N.A.	N.A.	—		—		—	
12,589	22	4.5	21	17.3	14	4.16	1.90	1.99	7.67	18	0.43	14	31.35	4
6,300	31	—		—		(4.13)	(12.34)	1.20	—		15.22	6	1.60	32
10,264†	25	—		—		(1.37)	(3.60)	1.59	—		(23.53)	29	(3.34)	33
742	48	38.9	1	80.1	3	N.A.	N.A.	N.A.	—		—		—	
9,863	26	6.1	18	6.2	38	N.A.	N.A.	N.A.	—		—		—	
3,500	41	6.4	16	17.5§	12	1.53	0.65	N.A.	—		4.65	11	—	
3,176	43	11.2	7	20.5	8	8.67	2.26	3.08	10.91	12	12.91	8	—	
900	46	32.5	3	40.7	4	N.A.	N.A.	N.A.	—		—		—	
11,000†	24	2.4	35	6.7	36	1.29	2.28	1.08	1.79	25	(39.08)	35	—	
6,800	30	3.9	26	19.0	10	1.70	1.45	0.80	7.76	17	(30.24)	32	4.70	30
18,635	16	2.0	38	7.3	35	2.05	4.56	2.05	0.02	27	(51.63)	39	13.74	24
3,883	40	0.3	43	—		(0.90)	(2.95)	0.40	—		(0.69)	16	22.93	11
4,969	35	—		—		(2.59)	(1.29)	1.07	—		14.41	7	18.12	18
5,000	34	34.6	2	—		N.A.	N.A.	N.A.	—		—		—	
5,700	33	3.9	27	36.7	5	2.40**	0.79**	(1.35)[15]	—		—		41.09	3
5,980	32	0.3	44	0.9	41	(0.18)	0.57**	N.A.	—		(51.50)	38	—	
3,934	39	9.3	9	13.7	23	1.69	1.40	0.15	27.71	4	(18.64)	25	54.06	1
8,055	28	2.9	30	19.4	9	3.09**	2.08**	(1.45)	—		(39.53)	36	20.15	13
965	45	1.5	40	27.0	7	7.40	4.14	0.51	30.67	2	—		—	
760	47	0.6	42	11.6	28	N.A.	N.A.	N.A.	—		—		—	
4,400	36	9.8	8	12.2	26	4.82	4.11	0.58	23.55	5	(19.44)	26	43.68	2
2,129	44	2.9	31	17.9	11	3.09	1.95	0.25	28.04	3	69.59	1	—	
7,671	29	2.6	34	17.2§	15	2.16	2.12	0.38	18.82	7	(24.63)	30	30.54	5
4,047	38	2.7	32	10.4	31	1.08	0.17	0.49	8.22	15	(4.15)	20	16.64	20
3,450	42	14.4	5	15.1	20	3.60	2.88	3.85	(0.67)	28	45.62	2	23.09	10
4,100	37	2.6	33	14.2	22	1.85	1.60	0.80	8.74	14	(35.80)	33	24.51	9
N.A.	0	—		—		(30.36)	8.42	5.1[illegible]	—		—		—	
965,902														

[6] Figure is for Norfolk & Western Railway.

[7] Formed as parent company of Northwest Airlines on November 20, 1984.

[8] Figure is for North Central Airlines.

[9] Figures are for fiscal year ended May 31, 1984.

[10] Company is wholly owned by Standard Oil of Ohio (No. 24 on the FORTUNE 500).

[11] Company is wholly owned by Exxon (No. 1 on the FORTUNE 500).

[12] Company is wholly owned by IC Industries (No. 90 on the FORTUNE 500).

[13] Company is wholly owned by Atlantic Richfield (No. 12 on the FORTUNE 500).

[14] Company is wholly owned by British Petroleum (No. 2 among the 1983 Largest Industrial Corporations Outside the U.S.).

[15] Figure is for Arctic Enterprises.

[16] Formed as a holding company for Ozark Air Lines on October 1, 1984.

RANK 1984	RANK 1983	COMPANY	ASSETS[1] $ THOUSANDS	OPERATING REVENUES[2] $ THOUSANDS	RANK	NET INCOME $ THOUSANDS	RANK	STOCKHOLDERS' EQUITY $ THOUSANDS	RANK
1	2	**GTE** (Stamford, Conn.)	26,364,230	14,547,344	1	1,125,118	2	7,619,374	3
2	•	**BellSouth** (Atlanta)	23,673,200	9,518,600	2	1,257,200	1	9,414,500	1
3	•	**NYNEX** (New York)	19,853,400	9,506,800	3	986,400	4	7,854,400	2
4	•	**Bell Atlantic** (Philadelphia)	18,684,300	8,090,100	5	973,100	6	7,508,500	4
5	•	**Pacific Telesis Group** (San Francisco, Calif.)	18,076,500	7,824,300	7	828,500	10	6,482,300	9
6	•	**Southwestern Bell** (St. Louis)	18,042,100	7,191,300	9	883,100	8	6,994,800	6
7	•	**Ameritech** (Chicago)	17,625,100	8,346,800	4	990,600	3	7,087,500	5
8	3	**Pacific Gas & Electric** (San Francisco)	17,327,133	7,829,703	6	974,892	5	6,870,997	7
9	•	**US West** (Englewood, Colo.)	17,017,400	7,279,600	8	887,000	7	6,647,500	8
10	5	**Southern** (Atlanta)	15,003,960	6,123,985	11	719,669	12	4,639,227	12
11	4	**Commonwealth Edison** (Chicago)	14,712,792	4,929,671	14	875,478	9	5,514,085	10
12	6	**American Electric Power** (Columbus, Ohio)	13,553,153	4,951,901	13	487,567	18	3,867,106	15
13	7	**Middle South Utilities** (New Orleans)	12,555,531	3,146,035	25	508,437	15	3,472,246	17
14	8	**Southern California Edison** (Rosemead)	11,358,730	4,899,152	15	732,428	11	4,710,046	11
15	9	**Texas Utilities** (Dallas)	9,759,148	3,932,235	21	526,041	14	4,301,014	14
16	10	**Public Service Electric & Gas** (Newark)	9,640,644	4,196,124	18	490,029	17	3,685,878	16
17	14	**Philadelphia Electric**	9,555,729	2,981,017	26	492,389	16	3,463,447	18
18	11	**Consumers Power** (Jackson, Mich.)	9,211,250	3,255,570	23	221,058	39	2,975,115	20
19	13	**Detroit Edison**	8,970,014	2,498,205	33	401,937	21	2,913,393	21
20	12	**Consolidated Edison** (New York)	8,688,099	5,720,831	12	619,971	13	4,612,076	13
21	15	**FPL Group** (Miami)‡	8,160,672	3,940,934	20	302,729	28	2,382,324	26
22	16	**Dominion Resources** (Richmond, Va.)	8,097,815	2,604,528	32	293,265	30	2,496,385	23
23	17	**Duke Power** (Charlotte, N.C.)	8,018,818	2,710,015	31	461,231	19	3,232,533	19
24	18	**Houston Industries**	7,641,720	4,181,575	19	366,300	22	2,481,159	24
25	19	**Long Island Lighting** (Mineola, N.Y.)	7,100,173	1,973,550	37	427,788	20	2,671,861	22
26	20	**Pennsylvania Power & Light** (Allentown)	6,910,783	1,562,782	44	318,903	27	2,128,362	29
27	21	**Ohio Edison** (Akron)	6,690,098	1,637,104	43	339,333	25	2,360,942	27
28	22	**Central & South West** (Dallas)	6,418,794	2,766,156	29	353,739	24	2,265,787	28
29	23	**Niagara Mohawk Power** (Syracuse, N.Y.)	6,233,401	2,785,546	28	359,734	23	2,417,117	25
30	24	**General Public Utilities** (Parsippany, N.J.)	6,215,792	2,735,286	30	148,258	46	1,637,348	40
31	25	**Carolina Power & Light** (Raleigh, N.C.)	5,963,639	1,884,250	39	294,152	29	2,040,520	31
32	27	**Union Electric** (St. Louis)	5,878,691	1,412,414	46	324,164	26	2,080,720	30
33	31	**Texas Eastern** (Houston)	5,757,357	6,194,239	10	212,358	40	1,537,879	44
34	32	**Northeast Utilities** (Berlin, Conn.)	5,507,040	2,095,252	35	288,938	32	1,575,708	43
35	30	**United Telecommunications** (Westwood, Kans.)	5,440,680	2,855,515	27	235,238	38	1,715,365	35
36	28	**Panhandle Eastern** (Houston)	5,369,112	3,212,362	24	166,480	44	1,633,783	41
37	26	**Columbia Gas System** (Wilmington, Del.)	5,200,536	4,593,382	17	152,892	45	1,604,225	37
38	37	**Cleveland Electric Illuminating**	4,926,441	1,215,353	48	291,632	31	1,736,831	33
39	35	**Gulf States Utilities** (Beaumont, Tex.)	4,886,844	1,847,041	45	258,171	34	1,728,342	34
40	36	**Public Service Co. of Indiana** (Plainfield)	4,860,383	910,276	50	85,518	49	1,708,761	36
41	33	**PacifiCorp** (Portland, Ore.)§	4,735,932	1,786,120	40	244,625	35	1,674,382	38
42	34	**Arizona Public Service** (Phoenix)	4,653,774	1,169,695	49	271,067	33	1,914,484	32
43	38	**Continental Telecom** (Atlanta)	4,556,865	2,318,882	34	195,922	42	1,296,914	47
44	41	**Pacific Lighting** (Los Angeles)	4,242,928	4,781,481	16	138,571	48	1,459,740	45
45	40	**Baltimore Gas & Electric**	4,010,796	1,761,474	42	243,915	36	1,668,326	39
46	39	**American Natural Resources** (Detroit)	4,000,700	3,492,700	22	196,100	41	1,195,100	50
47	45	**Illinois Power** (Decatur)	3,964,515	1,280,537	47	235,478	37	1,602,246	42
48	•	**MCI Communications** (Washington, D.C.)§	3,893,818	1,959,291	38	59,203	50	1,199,121	49
49	42	**Northern Indiana Public Service** (Hammond)	3,786,643	2,001,072	36	140,469	47	1,256,544	48
50	46	**Northern States Power** (Minneapolis)	3,741,730	1,775,609	41	192,103	43	1,345,589	46
		TOTALS	466,568,903	201,871,694		22,579,298		166,761,799	

• Not on last year's list.
N.A. Not available.
** Reflects an extraordinary credit of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

† Average for the year; see the reference to "employees" on page 200.
‡ Reflects an extraordinary charge of at least 10%; see the explanations of "net income" and "earnings per share" on page 200.

§ Dividends paid by company on its mandatory redeemable preferred stock were subtracted from net income in calculating this figure.

[1] Assets are shown as of December 31, 1984, unless otherwise noted. Only assets of consolidated subsidiaries are included.

NET INCOME AS PERCENT OF EQUITY		EMPLOYEES		EARNINGS PER SHARE					TOTAL RETURN TO INVESTORS			
							1974-84 GROWTH RATE		1984		1974-84 AVERAGE	
PERCENT	RANK	NUMBER	RANK	1984/$	1983/$	1974/$	PERCENT	RANK	PERCENT	RANK	PERCENT	RANK
14.8	8	185,000	1	5.35	5.00	2.13	10.05	2	(0.24)	45	17.50	16
13.4	26	95,704	2	4.28	N.A.	N.A.	—		28.01	19	—	
12.6	37	94,662	3	10.10	N.A.	N.A.	—		28.05	18	—	
13.0	32	82,800	4	9.94	N.A.	N.A.	—		30.54	12	—	
12.8	34	76,881	6	8.46	N.A.	N.A.	—		31.40	11	—	
12.6	36	71,900	7	9.04	N.A.	N.A.	—		28.95	14	—	
14.0	19	77,514	5	10.17	N.A.	N.A.	—		25.97	24	—	
13.8§	21	28,400	10	2.62	2.15	1.63	4.83	19	21.24	31	15.64	25
13.3	27	70,765	8	9.24	N.A.	N.A.	—		34.02	7	—	
15.5	5	31,121	9	3.00	2.70	1.41	7.84	6	26.44	22	19.86	11
14.5§	13	18,443	16	4.43	4.39	2.88	4.40	24	18.75	34	13.25	33
11.3§	41	23,333	12	2.65	2.44	2.64	0.04	38	37.02	5	15.66	24
14.6	11	13,447	21	2.86	2.46	2.21	2.61	34	15.81	37	11.68	37
15.6	4	16,866	17	3.18	3.11	2.05	4.49	22	24.38	27	20.00	10
12.2§	39	16,208	18	4.15	3.90	2.18	6.65	11	23.42	29	10.32	38
12.8§	33	13,706	20	3.95	3.40	2.35	5.33	18	29.45	13	20.46	5
14.2§	15	10,661†	32	2.70	2.40	1.81	4.08	28	18.78	33	15.97	22
5.7§	48	11,599	26	1.14	3.12	2.29**	(6.74)	41	(59.61)	50	4.78	42
13.8§	22	11,136	28	2.20	2.21	1.46	4.19	26	28.58	16	19.79	13
13.3§	28	21,481	13	4.48	4.16	1.22‡	13.89	1	32.14	9	33.98	1
12.3§	38	13,300	23	2.62	2.51	1.38	6.62	12	20.42	32	20.11	9
10.6§	42	13,302	22	3.46	3.28	2.79	2.18	35	42.26	2	20.12	8
13.4§	25	20,325	15	3.98	3.77	1.80	8.26	4	25.05	26	20.41	6
14.8	9	11,578	27	3.85	3.54	1.95	7.06	8	28.72	15	13.15	34
16.0	3	5,242	47	3.09	2.80	2.04	4.24	25	(28.87)	47	7.23	40
11.5§	40	8,386	39	3.12	3.06	2.88	0.80	36	33.75	8	16.07	21
13.6§	23	7,611	40	2.50	2.22	1.89	3.34	32	25.22	25	13.68	30
14.8§	10	9,301	35	3.43	3.02	1.79	6.72	10	26.41	23	13.88	29
13.2§	31	10,800	31	2.84	2.77	1.92	3.99	30	22.89	30	19.79	12
8.6§	47	13,216	24	2.36	0.83‡	2.45	(0.37)	39	48.39	1	6.16	41
13.2§	30	9,220	36	3.81	3.21	2.21	5.60	15	26.80	21	19.36	14
14.5§	12	7,219	43	2.84	2.66	1.37	7.56	7	41.51	3	17.50	17
13.8	20	14,700	19	4.04	2.97	1.85	8.09	5	8.71	43	13.41	32
16.8§	1	9,100	38	2.85	2.37	1.85**	4.42	23	28.41	17	20.37	7
13.5§	24	27,639	11	2.57	2.61	1.62	4.72	20	14.22	39	13.96	28
10.0§	43	6,100	44	3.88	3.64	2.29	5.39	16	9.48	42	16.43	20
8.6§	46	11,000	29	3.53	4.41	3.33	0.58	37	5.48	44	12.94	36
15.0§	6	5,830	46	3.64	3.28	2.45	4.02	29	17.74	36	13.50	31
13.3§	29	5,182	48	2.30	2.31	1.69	3.13	33	14.82	38	12.97	35
4.4§	50	3,967	50	1.06	4.46	2.53	(8.32)	42	(31.18)	48	0.15	43
14.2§	17	9,479	34	3.03	0.45‡	2.03	4.09	27	10.67	41	15.74	23
12.7§	35	7,360	41	3.26	3.46	2.34	3.37	31	26.97	20	16.92	18
14.8§	7	21,471	14	2.67	2.45	1.53	5.73	14	12.05	40	16.84	19
9.1§	45	11,965	25	3.56	5.02	2.11	5.37	17	23.66	28	21.29	3
14.0§	18	9,134	37	5.54	4.93	2.86	6.84	9	38.10	4	20.88	4
16.4	2	10,900	30	5.26	4.69	3.23	4.67	21	35.48	6	15.05	26
14.4§	14	4,236	49	4.02	3.80	2.26	5.93	13	31.95	10	14.16	27
4.9	49	9,870	33	0.25	0.85	(0.40)	—		(47.83)	49	31.95	2
9.9§	44	5,886	45	1.62	1.73	1.92	(1.68)	40	(9.09)	46	8.42	39
14.2§	16	7,347	42	5.80	5.60	2.40	9.22	3	18.03	35	19.36	15
		1,282,293										

[1] Gross receipts from operations during the 1984 fiscal year, including any non-utility revenues from manufacturing, transportation, etc., and revenues from discontinued operations when they are published. All companies on the list must have derived more than 50% of their revenues from utility operations.

[3] Formed as a holding company for Florida Power & Light on December 31, 1984.

[4] Name changed from Pacific Power & Light on June 13, 1984.

[5] Figures are for fiscal year ended March 31, 1984.

WHO DID BEST AND WORST AMONG THE SERVICE 500

KEY

- **B** Commercial Banking Companies page 180
- **F** Diversified Financial Companies page 184
- **L** Life Insurance Companies page 188
- **R** Retailing Companies page 190
- **S** Diversified Service Companies page 176
- **T** Transportation Companies page 192
- **U** Utilities page 194

TOTAL RETURN TO INVESTORS, 1984

THE TEN HIGHEST	Rank	
Donaldson Lufkin & Jenrette	F33	89.47%
Mayflower	T45	69.59
State Street Boston Corp.	B81	61.97
First of America Bank Corp.	B86	53.77
Bank of Virginia Co.	B90	53.64
Old Kent Financial Corp.	B95	52.02
Torchmark	F54	50.41
CoreStates Financial Corp.	B34	48.52
General Public Utilities	U30	48.39
South Carolina National Corp.	B93	48.20
THE FIVE LOWEST		
Bell National	F79	-73.26%
Continental Illinois Corp.	B12	-69.14
Evans Products	R50	-61.84
Consumers Power	U18	-59.61
Financial Corp. of America	F7	-57.75
THE SERVICE 500 MEDIANS		
Utilities		25.14%
Commercial Banking		17.87
Retailing		6.31
Diversified Financial		5.34
Transportation		-4.15
Diversified Service		-4.92
All Industries		*8.07*

Life insurance companies are not included.

TOTAL RETURN TO INVESTORS, 1974-84 AVG.

THE TEN HIGHEST	Rank	
Pulte Home	S73	71.05%
Humana	S31	58.48
Southwest Airlines	T40	54.06
Wal-Mart Stores	R13	52.38
National Medical Enterprises	S28	51.86
Food Lion	R48	49.06
Service Merchandise	R46	46.45
Zayre	R31	46.22
Tandy	R34	45.79
SCOA Industries	R49	45.27
THE FIVE LOWEST		
Wickes Companies	R32	-4.39%
Western Air Lines	T26	-3.34
DEKALB AgResearch	S91	-3.21
First Pennsylvania Corp.	B73	-2.96
Pittston	S49	-2.14
THE SERVICE 500 MEDIANS		
Diversified Service		24.03%
Retailing		23.30
Commercial Banking		20.10
Diversified Financial		19.06
Transportation		18.24
Utilities		15.97
All Industries		*19.97*

Life insurance companies are not included.

RETURN ON STOCKHOLDERS' EQUITY

THE TEN HIGHEST	Rank	
Sohio Pipe Line	T23	664.5%
Republic Airlines	T17	288.9
CenTrust Savings	F55	88.8
Wickes Companies	R32	87.1
Exxon Pipeline	T27	80.1
ServiceMaster Industries	S68	44.9
United Financial Group	F48	42.6
ARCO Pipe Line	T31	40.7
Minstar	T38	36.7
GEICO	F80	31.2

THE SERVICE 500 MEDIANS	1984	1983
Retailing	15.4%	16.7%
Utilities	13.4	13.3
Transportation	12.9	11.6
Commercial Banking	12.8	12.5
Diversified Service	12.3	11.8
Diversified Financial	8.3	11.7
All Industries	*12.7*	*12.6*

Life insurance companies are not included.

RETURN ON SALES

THE TEN HIGHEST	Rank	
Exxon Pipeline	T27	38.9%
BP Pipelines	T37	34.6
ARCO Pipe Line	T31	32.5
Sohio Pipe Line	T23	29.3
Cleveland Electric Illuminating	U38	24.0
Arizona Public Service	U42	23.2
Union Electric	U32	23.0
Long Island Lighting	U25	21.7
Ohio Edison	U37	20.7
Pennsylvania Power & Light	U26	20.4

THE SERVICE 500 MEDIANS	1984	1983
Utilities	12.1%	11.7%
Transportation	4.0	3.4
Retailing	2.9	2.6
Diversified Service	2.6	2.3
All Industries	*3.8*	*3.5*

Commercial banks, diversified financial, and life insurance companies are not included.

SALES PER DOLLAR OF STOCKHOLDERS' EQUITY

THE TEN HIGHEST	Rank	
Tiger International	T25	$616.98
Republic Airlines	T17	179.08
Financial Corp. of Santa Barbara	F57	79.80
AGRI Industries	S26	52.63
Farm House Foods	S40	51.14
Early & Daniel Industries	S90	38.01
Landmark	S95	33.86
Rapid-American	R36	30.65
Turner	S35	28.77
Grand Union	R27	25.20
THE FIVE LOWEST		
Berkshire Hathaway	S82	$0.57
Public Service Co. of Indiana	U40	0.53
Georgia Federal Bank	F70	0.28
BP Pipelines	T37	–11.77
Texas Air	T21	–51.02
THE SERVICE 500 MEDIANS		
Retailing		$5.46
Diversified Service		4.72
Transportation		3.38
Diversified Financial		2.84
Utilities		1.12
All Industries		*3.15*

Commercial banks and life insurance companies are not included.

ASSETS PER EMPLOYEE

THE TEN HIGHEST	Rank	
Fed. National Mortgage Assoc.	F1	$56,567,743
Student Loan Marketing Assoc.	F19	17,063,477
Sohio Pipe Line	T23	16,620,937
Bank of Tokyo Trust	B78	13,742,504
Columbia Savings & Loan Assoc.	F32	12,439,791
First Boston	F8	9,337,944
Teachers Insurance & Annuity	L9	8,437,917
Executive Life	L23	8,425,993
Phibro-Salomon	S1	8,338,571
Kemper Investors Life	L44	6,934,018
THE FIVE LOWEST		
Publix Super Markets	R30	$18,013
Winn-Dixie Stores	R12	16,794
Transworld	R39	15,847
ServiceMaster Industries	S68	13,959
ARA Services	S15	12,526
THE SERVICE 500 MEDIANS		
Diversified Financial		$2,456,874
Commercial Banking		1,393,447
Life Insurance		1,129,013
Utilities		603,644
Transportation		106,741
Diversified Service		80,076
Retailing		31,405
All Industries		*643,330*

WHO DID BEST AND WORST AMONG THE SERVICE 500

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SALES PER EMPLOYEE

THE TEN HIGHEST

	Rank	
Sohio Pipe Line	T23	$7,482,194
Fed. National Mortgage Assoc.	F1	5,815,468
AGRI Industries	S26	4,158,101
Phibro-Salomon	S1	4,130,143
Early & Daniel Industries	S90	2,237,921
Union Equity Co-operative Exchange	S96	2,059,658
Pacific Resources	S36	1,979,274
Student Loan Marketing Assoc.	F19	1,783,358
Subaru of America	S52	1,516,015
Exxon Pipeline	T27	1,381,666

THE FIVE LOWEST

Marriott	R26	$29,350
Transworld	R39	27,424
McDonald's	R28	24,569
Hilton Hotels	S88	22,147
Beverly Enterprises	S42	16,323

THE SERVICE 500 MEDIANS

Diversified Financial	$297,693
Utilities	226,899
Diversified Service	167,468
Transportation	115,149
Retailing	85,666
All Industries	*190,384*

Commercial banks and life insurance companies are not included.

CHANGES IN SALES

THE TEN BIGGEST INCREASES

	Rank	
Homestead Financial	F56	120.6%
Bell National	F79	117.3
Burlington Northern	T1	103.1
Monarch Capital	F78	97.6
Price	S54	80.8
Financial Corp. of America	F7	79.5
Security Capital	F84	73.1
AGRI Industries	S26	62.2
Far West Financial	F77	60.3
Financial Corp. of Santa Barbara	F57	53.7

THE TEN BIGGEST DECREASES

Greyhound	S27	45.8%
Fischbach	S62	27.4
Pittston	S49	22.7
Fluor	S9	17.0
Tiger International	T25	16.4
Foster Wheeler	S44	13.9
Orbanco Financial Services	F96	10.9
Whittaker	S41	10.3
Columbia Gas System	U37	9.6
Indiana Farm Bureau Cooperative	S61	8.5

THE SERVICE 500 MEDIANS

	INCREASES
Diversified Financial	17.8%
Transportation	14.0
Retailing	10.7
Diversified Service	10.4
Utilities	8.2

Commercial banks and life insurance companies are not included.

CHANGES IN PROFITS

THE TEN BIGGEST INCREASES*

	Rank	
Farm house Foods	S40	2417.9%
Wickes Companies	R32	1096.0
Ozark Holdings	T47	550.5
Sooner Federal S.&L. Assoc.	F88	473.7
American President Companies	T30	292.6
PacifiCorp	U41	244.9
Downey Savings & Loan Assoc.	F72	238.3
General Public Utilities	U30	191.3
First Columbia Financial	F66	181.3
Arrow Electronics	S80	151.2

THE TEN BIGGEST DECREASES*

U. S. Fidelity & Guaranty	F34	98.4%
Fluor	S9	96.4
Paine Webber Group	F21	85.6
American Security Corp.	B92	84.9
Fischbach	S62	83.9
IU International	S20	82.4
CIGNA	F4	80.8
Perini	S74	78.8
Carteret Savings & Loan Assoc.	F40	78.4
Electronic Data Systems	S77	73.6

THE SERVICE 500 MEDIANS

	INCREASES
Transportation	28.7%
Commercial Banking	19.0
Diversified Service	18.7
Utilities	13.8
Retailing	13.5
Diversified Financial	6.1

* Listings exclude money losers.
Life insurance companies are not included.

THE MONEY LOSERS

	Rank	Loss
Continental Illinois Corp.	B12	$1,087,732,000
Financial Corp. of America	F7	590,493,000
Crocker National Corp.	B15	324,442,000*
St. Paul Companies	F38	210,851,000
Pan American World Airways	T10	206,836,000*
European American Bancorp.	B48	132,844,000
Grand Union	R27	115,240,000
Bally Manufacturing	S47	100,411,000
Tiger International	T25	88,940,000*
Castle & Cooke	S32	76,667,000*
Chicago Milwaukee St. Paul & Pacific Railroad	T50	66,186,000
Fed. National Mortgage Assoc.	F1	57,374,000

	Rank	Loss
Alexander & Alexander Services	F98	$49,600,000
American Financial	F39	45,360,000
U.S. Home	S56	43,934,000
Eastern Air Lines	T8	37,927,000*
Evans Products	R50	31,188,000*
Frontier Holdings	T36	31,108,000*
Western Air Lines	T26	29,165,000*
Pittston	S49	26,147,000*
Dravo	S70	20,110,000*
Financial Corp. of Santa Barbara	F57	19,881,000*
Freedom Savings & Loan Assoc.	F67	15,918,000*
Western Co. of North America	S100	14,553,000*

	Rank	Loss
Amfac	S23	$14,149,000*
Broadview Financial	F75	12,404,000
Valley Federal S.&L. Assoc.	F63	11,546,000
Washington Mutual Savings	F50	9,540,000
Rapid-American	R36	8,356,000
American Savings & Loan Assoc.	F65	7,197,000*
Di Giorgio	S58	4,895,000
Orbanco Financial Services	F96	3,989,000*
First Federal S.&L. of South Carolina	F89	3,483,000
Dallas Federal Financial	F73	3,453,000*
Early & Daniel Industries	S90	3,193,000
Perpetual American Bank	F49	1,997,000

*Also lost money in 1983.
Life insurance companies are not included.

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ARRIVALS AND DEPARTURES

NEWCOMERS TO THE SERVICE 500

	Rank
American Continental	S89
Ameritech	U7
AmeriWest Financial	F93
Atlantic Federal Savings & Loan	F85
Atlantic Financial Federal	F33
Bancorp Hawaii	B98
Bell Atlantic	U4
BellSouth	U2
Berkshire Hathaway	S82
Boston Five Cent Savings Bank	F90
CenTrust Savings	F55
Columbia Savings & Loan Assoc.	F32
Continental Bancorp	B89
Dynalectron	S93
First Federal S.&L. of South Carolina	F89
First Florida Banks	B100
FirstSouth, F.A.	F100
Food Lion	R48
Georgia Federal Bank	F70
Great American First Savings Bank	F31
Home Federal Bank of Florida	F95
Howard Savings Bank	F51
John Blair	S71
Kelly Services	S79
Landmark Banking Corp. of Florida	B99
Landmark Savings Assoc.	F99
Marshall & Ilsley Corp.	B97
Minstar	T38
MCI Communications	U48
New York Life Insurance & Annuity	L41
Northeast Savings, F.A.	F52
NYNEX	U3
Old Stone	F64
Pacific First Federal Savings Bank	F66
Pacific Resources	S36
Pacific Telesis Group	U5
People Express Airlines	T39
Perpetual American Bank	F49
Philadelphia Savings Fund Society	F14
Sea-Land	T14
Society for Savings	F69
South Carolina National Corp.	B93
Southwestern Bell	U6
Transamerica Life & Annuity	L45
US West	U9
Washington Mutual Savings	F50

RETURNED TO THE SERVICE 500[6]

Arixter Bros. (1982: S97)	S99
Pioneer Hi-Bred International (1982: S93)	S83
SCOA Industries (1981: R48)	R49
Southwestern Life (1982: L45)	L18
Union Equity Co-operative Exchange (1982: S83)	S96
Union Pacific (1978: T3)	T3

DISPLACED FROM THE SERVICE 500

	1983 rank
American Carriers	T50
Allegheny Power System	U44
American Tel. & Tel.[1]	U1
American United Life	L50
Boatmen's Bancshares	B97
BanCal Tri-State Corp.[4]	B84
BancOhio Corp.[4]	B55
Beverly Hills Savings & Loan Assoc.	F59
Buckeye Financial	F82
Coast Federal S.&L. Assoc.	F89
Comdisco	S99
Charter Security Life	L46
City Investing	S3
Colonial Penn Group	F85
Consolidated Natural Gas	U48
Dorchester Gas	S41
El Paso Natural Gas	U47
Enserch	U49
Fidelity Union Bancorp.[4]	B87
First Lincoln Financial[5]	F87
First Savings Assoc. of Wisconsin	F81
First Western Financial	F94
Flickinger (S.M.)	S37
Fremont General	F97
Gibraltar Savings Assoc.	F39
Hall (Frank B.)	F96
Hanover Insurance	F84
Heller (Walter E.) International[4]	F24
Jewel Companies[3]	R14
Kaneb Services	S91
Liberty	F99
Liberty National	L49
Lincoln First Banks[3]	B80
Lomas & Nettleton Financial	F95
Malone & Hyde	S18
Mission Insurance Group	F93
Nafco Financial Group	F100
Nevada Savings & Loan Assoc.	F91
Nielsen (A.C.)[3]	S79
Overnite Transportation	T47
PHH Group	S93
Parsons[5]	S70
Ryan Homes	S89
Rio Grande Industries[5]	T46
SEDCO	S97
Sonat	U50
Southland Financial	F92
Southwest Bancshares[3]	B37
Texas Federal S.&L. Assoc.	F73
Tidewater	T40
Transco Energy	U43
United States Leasing International	F90

[1] Reclassified as an industrial.
[2] Acquired by a company on the FORTUNE 500 International listing.
[3] Acquired by another company on the FORTUNE Service 500.
[4] Acquired by a company on the International Banking list.
[5] Figures no longer made public.
[6] Figures in parentheses indicate year and sales rank the last time the company was listed.

NOTES TO THE SERVICE 500

Assets
Assets are those shown at the company's fiscal year-end.

Net Income
Net income is shown after taxes and after extraordinary credits or charges if any are shown on the income statement. A double asterisk (**) signifies an extraordinary credit reflecting at least 10% of the net income shown, a double dagger (‡) an extraordinary charge of at least 10%. Figures in parentheses indicate a loss.

Stockholders' Equity
Stockholders' equity is the sum of capital stock, surplus, and retained earnings at the company's year-end. Redeemable preferred stock is excluded if its redemption is either mandatory or outside the control of the company, except in the case of cooperatives. For purposes of calculating "net income as percent of stockholders' equity," any dividends paid on redeemable preferred stock, if that stock's redemption is either mandatory or outside the control of the company, have been subtracted from the net income figure.

Employees
The figure shown is a year-end total except when it is followed by a dagger (†), in which case it is an average for the year.

Earnings per Share
For all companies the figures shown are the primary earnings per share that appear on the company's income statement. These figures are based on a weighted average of the number of common shares and common stock equivalents outstanding during the year. Per-share earnings for 1983 and 1984 are adjusted for stock splits and stock dividends. They are not restated for mergers, acquisitions, or accounting changes made after 1974. A double asterisk (**) signifies an extraordinary credit reflecting at least 10%. Results are listed as not available (N.A.) if the companies are cooperatives, joint ventures, or wholly owned subsidiaries of other companies, or if the figures were not published in 1974. The growth rate is the average annual growth, compounded. No growth rate is given if the company had a loss in either 1974 or 1984.

Total Return to Investors
Total return to investors includes both price appreciation and dividend yield to an investor in the company's stock. The figures shown assume sales at the end of 1984 of stock owned at the end of 1974 or 1983. It has been assumed that any proceeds from cash dividends, the sale of rights and warrant offerings, and stock received in spinoffs were reinvested at the end of the year in which they were received. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur; however, no effort has been made to reflect the cost of brokerage commissions or of taxes. Results are listed as not available (N.A.) if shares are not publicly traded or are traded on only a limited basis. If companies have more than one class of shares outstanding, only the more widely held and actively traded has been considered.

Total return percentages shown are the returns received by the hypothetical investor described above. The ten-year figures are annual averages, compounded. If corporations were substantially reorganized—e.g., because of mergers—the predecessor companies used in calculating total return are the same as those cited in the footnotes to the earnings-per-share figures.

Most of the figures in the FORTUNE Service 500 Directory were prepared by reporter Joshua Mendes. The figures on per-share earnings and on total return to investors were prepared by Claudine Knight. ■

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COMPANY	RANK
A	
AGRI Industries	S26
AMR	T7
ARA Services	S15
ARCO Pipe Line	T31
Aetna Life	L4
Aetna Life & Annuity	L27
Aetna Life & Casualty	F3
Ahmanson (H.F.)	F9
Airborne Freight	T49
Albertson's	R19
Alco Standard	S16
Alexander & Alexander Services	F98
Alexander & Baldwin	T48
Allied Bancshares	B36
Allied Stores	R24
Allied Van Lines	T42
American Broadcasting	S11
American Continental	S89
American Electric Power	U12
American Express	F2
American Family	F87
American Financial	F39
American General	F11
American Hospital Supply	S14
American International Group	F18
American Medical International	S30
American National	L35
American Natural Resources	U45
American President Companies	T30
American Savings & Loan Assoc.	F65
American S.&L. Assoc. of Fla.	F45
American Security Corp.	B92
American Stores	R6
Ameritech	U7
AmeriTrust Corp.	B56
AmeriWest Financial	F93
Amfac	S23
AmSouth Bancorp.	B85
Anixter Bros.	S99
Arizona Public Service	U42
Arkansas Best	T41
Arrow Electronics	S80
Associated Dry Goods	R22
Associated Milk Producers	S19
Atlantic Federal Savings & Loan	F85
Atlantic Financial Federal	F53
Automatic Data Processing	S65
Avnet	S39
B	
BATUS	R16
BP Pipelines	T37
Bally Manufacturing	S47
Baltimore Gas & Electric	U45
Banc One Corp.	B38
Bancorp Hawaii	B98
Bank of Boston Corp.	B16
Bank of New England Corp.	B58
Bank of New York Co.	B26
Bank of Tokyo Trust	B78
Bank of Virginia Co.	B90
BankAmerica Corp.	B2
Bankers Life	L12
Bankers Trust New York Corp.	B9
Barnett Banks of Florida	B29
BayBanks	B75
Bell Atlantic	U4
Bell National	F79
BellSouth	U2
Beneficial	F28
Bergen Brunswig	S24
Berkshire Hathaway	S82
Best Products	R37
Beverly Enterprises	S42
Blount	S74
Boston Five Cent Savings Bank	F90
Broadview Financial	F75
Brown Group	R47
Browning-Ferris Industries	S60
Burlington Northern	T1
C	
CBS	S8
CBT Corp.	B55
CPS Continental	S43
CIGNA	F4
CSX	T2
Caesars World	S94
CalFed	F13
California First Bank	B79
Capital Holding	F37
Capitol Life	L47
Carolina Freight	T46
Carolina Power & Light	U31
Carter Hawley Hale Stores	R25
Carteret Sav. & Loan Assoc.	F40
Castle & Cooke	S32
Centerre Bancorp.	B74
Centex	S51
Central & South West	U28
CenTrust Savings	F55
Chase Manhattan Corp.	B3
Chemical New York Corp.	B6
Chicago Milwaukee St. Paul & Pacific RR	T50
Chicago & North Western Trans.	T32
Chubb	F42
Citadel Holding	F58
Citicorp	B1
Citizens & S. Georgia Corp.	B44
Citizens Savings Financial	F81
CityFed Financial	F29
Cleveland Electric Illuminating	U38
Columbia Gas System	U37
Columbia Savings & Loan Assoc.	F32
Combined International	F62
Comerica	B35
Commerce Bancshares	B83
Commercial Metals	S53
Commonwealth Edison	U11
Computer Sciences	S84
Connecticut General Life	L8
Connecticut Mutual	L16
Consolidated Edison	U20
Consolidated Freightways	T15
Consumers Power	U18
Continental	F22
Continental Assurance	L21
Continental Bancorp	B89
Continental Illinois Corp.	B12
Continental Telecom	U43
CoreStates Financial Corp.	B34
Cox Communications	S78
Crocker National Corp.	B15
D	
DEKALB AgResearch	S91
Dairymen	S55
Dallas Federal Financial Group	F73
Dayton Hudson	R11
Delta Air Lines	T9
Detroit Edison	U19
Di Giorgio	S58
Dominion Bankshares	B84
Dominion Resources	U22
Donaldson Lufkin & Jenrette	F33
Downey Savings & Loan Assoc.	F72
Dravo	S70
Duke Power	U23
Dun & Bradstreet	S22
Dynalectron	S93
E	
Early & Daniel Industries	S90
Eastern Air Lines	T8
Eastern Gas & Fuel Associates	S45
Eckerd (Jack)	R35
Electronic Data Systems	S77
Emery Air Freight	T33
Equitable Life Assurance	L3
European American Bancorp.	B48
Evans Products	R50
Executive Life	L23
Exxon Pipeline	T27
F	
FPL Group	U21
Far West Financial	F77
Farm & Home Savings Assoc.	F61
Farm House Foods	S40
Farmers Group	F71
Farmland Industries	S7
Federal Express	T19
Fed. National Mortgage Assoc.	F1
Federated Department Stores	R8
Fidelcor	B64
Financial Corp. of America	F7
Financial Corp. of Santa Barbara	F57
First of America Bank Corp.	B86
First American Bankshares	B80
First American Corp.	B96
First Atlanta Corp.	B54
First Bank System	B14
First Boston	F8
First Chicago Corp.	B10
First City Bancorp. of Texas	B24
First Columbia Financial	F66
First Federal of Michigan	F23
First Fed. S.&L. Assoc. of Ariz.	F43
First Federal S.&L. of S. Carolina	F89
First Florida Banks	B100
First Interstate Bancorp.	B8
First Maryland Bancorp.	B91
First National State Bancorp.	B32
First Nationwide Financial	F24
First Pennsylvania Corp.	B73
First Security Corp.	B77
First Southern Fed. S.&L. Assoc.	F97
First Tennessee National Corp.	B82
First Union Corp.	B50
First Wisconsin Corp.	B70
FirstSouth, F.A.	F100
Fischbach	S62
Fleet Financial Group	F26
Fleming Companies	S5
Florida Federal S.&L. Assoc.	F41
Florida National Banks of Florida	B72
Fluor	S9
Food Lion	R45
Fortune Financial Group	F86
Foster Wheeler	S44
Franklin Life	L34
Freedom Savings & Loan Assoc.	F67
Frontier Holdings	T36
G	
GATX	S69
GEICO	F88
GTE	U1
Gelco	S63
General American Life	L39
General Public Utilities	U30
General Re	F35
Genuine Parts	S25
Georgia Federal Bank	F70
Giant Food	R40
Gibraltar Financial Corp. of Cal.	F25
Golden West Financial	F20
Grainger (W.W.)	S57
Grand Union	R27
Great Amer. First Savings Bank	F31
Great Atlantic & Pacific Tea	R17
Great Lakes Fed. S.&L. Assoc.	F74
Great Western Financial	F10
Greyhound	S27
Guarantee Finan. Corp. of Cal.	F59
Guardian of America	L40
Gulf States Utilities	U39
H	
Halliburton	S6
Harris Bankcorp.	B39
Hartford National Corp.	B61
Harvest States	S12
Hilton Hotels	S88
Holiday Inns	S33
Home Federal Bank of Florida	F95
Home Fed. S.&L. (San Diego)	F36
Home Fed. S.&L. Assoc. (Tucson)	F82
Home Life	L49
Homestead Financial	F56
Hospital Corp. of America	S13
Household International	R10
Houston Industries	U34
Howard Savings Bank	F51
Humana	S31
Huntington Bancshares	B69
Hutton (E.F.) Group	F12
I	
IDS Life	L24
IU International	S20
Illinois Central Gulf Railroad	T28
Illinois Power	U47
Imperial Corp. of America	F27
Indiana Farm Bureau Coop.	S61
InterFirst Corp.	B18
InterNorth	S3
Interpublic Group of Companies	S92
Irving Bank Corp.	B23
J	
John Blair	S71
John Hancock Mutual	L6

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K

K mart R2
Kansas City Southern Industries T44
Kaufman & Broad S98
Kay S75
Kelly Services S79
Kemper F20
Kemper Investors Life L44
Key Banks B68
Kroger R4

L

Landmark S85
Landmark Banking Corp. of Florida B99
Landmark Savings Assn. F99
Leaseway Transportation T22
Lincoln National F15
Lincoln National Life L19
Loews F16
Long Island Lighting U25
Lowe's Companies R45
Lucky Stores R9

M

MCorp B22
MCA S38
MCI Communications U48
MGM/UA Entertainment S86
Macy (R.H.) R20
Manufacturers Hanover Corp. B4
Manufacturers National Corp. B60
Marine Midland Banks B17
Marriott R26
Marshall & Ilsley Corp. B97
Maryland National Corp. B51
Massachusetts Mutual L11
May Department Stores R18
Mayflower T45
McDonald's R28
McKesson S10
McLean Industries T29
Mellon Bank Corp. B11
Melville R25
Mercantile Bancorp. B65
Mercantile Stores R43
Mercury Savings & Loan Assn. F76
Meridian Bancorp. B71
Merrill Lynch F6
Metropolitan L2
Metropolitan Fed. S&L (Fargo) F91
Michigan National Corp. B57
Middle South Utilities U13
Midlantic Banks B53
Minnesota Mutual Life L37
Minstar T38
Monarch Capital F78
Montgomery Ward R14
Morgan (J.P.) & Co. B5
Morrison-Knudsen S39
Mutual of America Life L48
Mutual Benefit L15
Mutual of New York L13

N

NBD Bancorp B28
NCNB Corp. B25
NKI S64
NWA T13
NYNEX U3
Nash-Finch S80
National City Corp. B31
National Investors Pension L43
National Life L36
National Life & Accident L39
National Medical Enterprises S28
National Westminster Bank USA B41
Nationwide Life L28
New England Mutual L14
New York Life L5
New York Life Insurance & Annuity L41
Niagara Mohawk Power U29
Norfolk Southern T2
Norstar Bancorp. B46
Northeast Savings, F.A. F52
Northeast Utilities U34
Northern Indiana Public Service U49
Northern States Power U33
Northern Trust Corp. B32
Northwestern Mutual L10
Northwestern National L30
Norwest Corp. B20

O

Ohio Casualty F83
Ohio Edison U37
Old Kent Financial Corp. B95
Old Republic International F92
Old Stone F64
Orbanco Financial Services F96
Ozark Holdings T47

P

PNC Financial Corp. B27
PSA T35
Pacific First Federal Savings Bank F68
Pacific Gamble Robinson S72
Pacific Gas & Electric U8
Pacific Lighting U44
Pacific Mutual L38
Pacific Resources S36
Pacific Telesis Group U5
PacifiCorp U41
Paine Webber Group F21
Pan American World Airways T10
Panhandle Eastern U36
Parker Pen S88
Penn Mutual L26
Penney (J.C.) R5
Pennsylvania Power & Light U28
People Express Airlines T39
Perini S74
Perpetual American Bank F49
Phibro-Salomon S1
Philadelphia Electric U17
Philadelphia Saving Fund Society F14
Phoenix Mutual L25
Piedmont Aviation T24
Pioneer Hi-Bred International S50
Pittston S49
Price S84
Provident Life & Accident L46
Provident Mutual L58
Prudential L1
Public Service Co. of Indiana U40
Public Service Electric & Gas U16
Publix Super Markets R30
Pulte Home S73
Purolator Courier T34

R

RCA S2
Rainier Bancorp. B47
Ramada Inns S97
Rapid-American R36
Reliance Group Holdings F47
Republic Airlines T17
Republic New York Corp. B29
RepublicBank Corp. B19
Revco D.S. R38
Riggs National Corp. B76
Roadway Services T18
Ryder System S21

S

SAFECO F46
SCOA Industries R49
Safeway Stores R3
St. Paul Companies F28
Santa Fe Southern Pacific T5
Sea-Land T14
Sears Roebuck R1
Security Capital F84
Security Pacific Corp. B7
Service Merchandise R46
ServiceMaster Industries S68
Shawmut Corp. B39
Society Corp. B67
Society for Savings F69
Sohio Pipe Line T23
Sooner Federal S&L Assn. F88
South Carolina National Corp. B93
Southeast Banking Corp. B33
Southern U10
Southern California Edison U14
Southern States Cooperative S57
Southland R7
Southwest Airlines T40
Southwestern Bell U6
Southwestern Life L18
Sovran Financial Corp. B40
State Farm Life L17
State Mutual of America L22
State Street Boston Corp. B81
Stop & Shop Companies R29
Student Loan Marketing Assn. F19
Subaru of America S52
Sun Banks B87
Sunkist Growers S81
Super Food Services S48
Super Valu Stores S4
Supermarkets General R21
Sysco S24

T

TRANSOHIO Financial F60
Tandy R24
Teachers Insurance & Annuity L9
Tesoro Petroleum S17
Texas Air T21
Texas American Bancshares B63
Texas Commerce Bancshares B21
Texas Eastern U23
Texas Utilities U15
Third National Corp. B98
Tiger International T25
Torchmark F50
Toys "R" Us R44
Trans World Airlines T11
Transamerica F17
Transamerica Life & Annuity L45
Transamerica Occidental Life L29
Transway International S67
Transworld S29
Travelers L7
Travelers Corp. F5
Trust Co. of Georgia B82
Turner S35

U

UAL T4
US West U9
USAir T16
Union Bank B43
Union Electric U50
Union Equity Co-operative Exchange S96
Union Mutual L31
Union Pacific T3
United Banks of Colorado B88
United Financial Group F48
United First Fed. S&L Assn. F94
United Jersey Banks B94
United of Omaha Life L42
United Parcel Service T1
U.S. Bancorp. B49
U.S. Fidelity & Guaranty F24
U.S. Home S56
U.S. Shoe R41
United Telecommunications U35
United Van Lines T43
United Virginia Bankshares B66
Univar S60
Universal Leaf Tobacco S59

V

Valley Federal S&L Assn. F63
Valley National Corp. B48
Variable Annuity Life L32

W

Wachovia Corp. B42
Wal-Mart Stores R13
Waldbaum R42
Walgreen R33
Walt Disney Productions S27
Washington Mutual Savings F55
Waste Management S46
Wells Fargo & Co. B13
Western Air Lines T26
Western Co. of North America S100
Western Savings & Loan Assn. F44
Western & Southern Life L30
Wetterau S18
Whittaker S41
Wickes Companies R50
Winn-Dixie Stores R12
Woolworth (F.W.) R15

Y

Yellow Freight System T30

Z

Zayre R31

JULY 22, 1985

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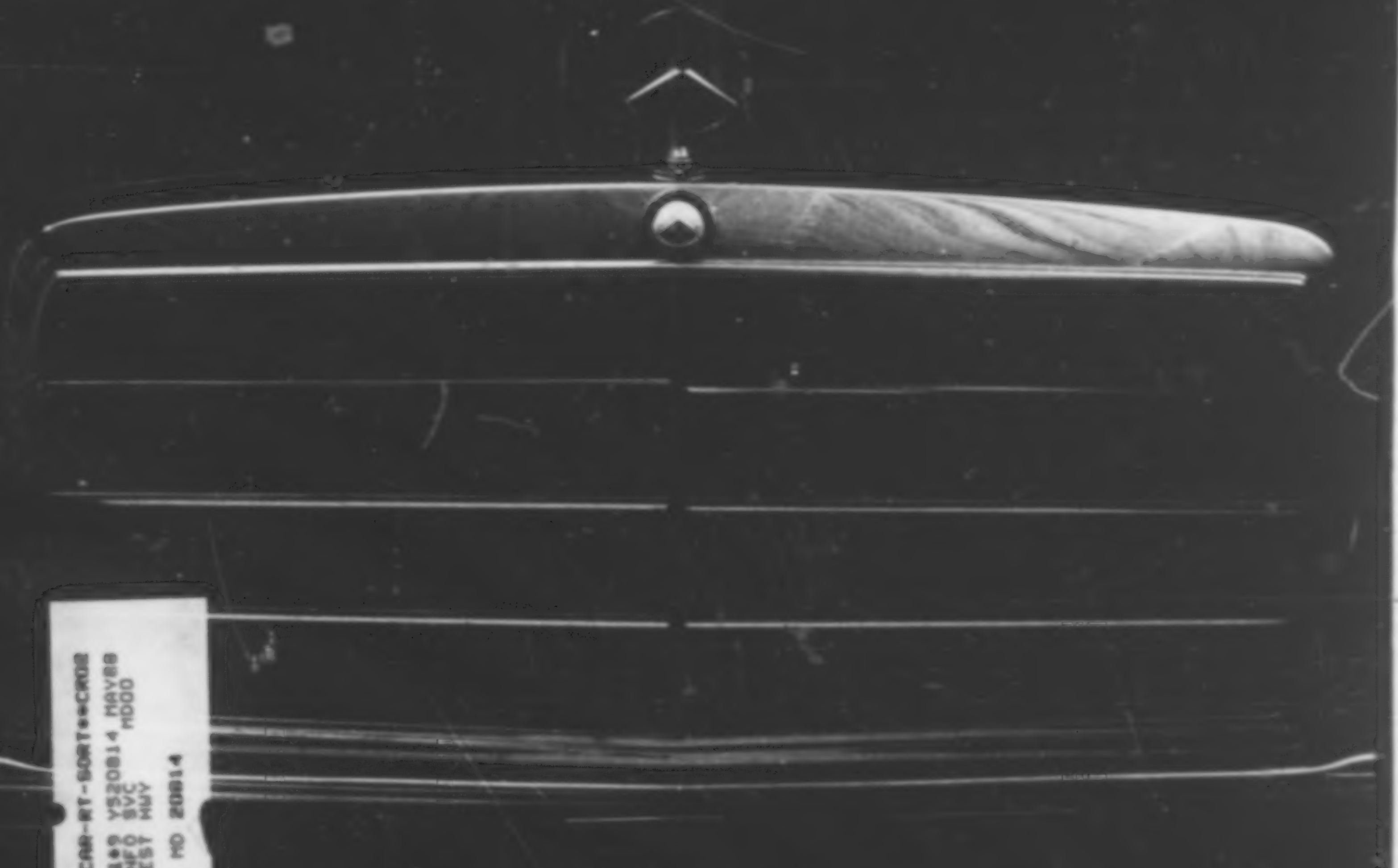
FORTUNE

THE NEXT 18 MONTHS
AN INDUSTRY-BY-INDUSTRY FORECAST

EXECUTIVE PERKS

WHAT'S HOT—AND HOW
REAGAN'S TAX PLAN
MIGHT CHANGE THINGS



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GETTING SET
FOR LOWER
OIL PRICES

THE LIMITED WAR
ON WHITE-COLLAR
CRIME

BEATRICE'S
CONTROVERSIAL
CHAIRMAN

JULY 22, 1985
VOL. 112, NO. 2

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IS BUSINESS TAKING ON TOO MUCH DEBT?

Takeover battles and leveraged buyouts have lengthened the roster of U.S. companies deeply in hock, and wanton borrowing has produced well-publicized bankruptcies. But most companies' debt, while high by historical standards, is far from the danger zone.

■ *by Kenneth Labich*

A DREAD OF DEBT no longer inhibits the top managements of U.S. corporations, which through good times and bad have been taking on more and more of it. But despite the lurid worries of many financial observers, corporate America doesn't seem to be borrowing its way to disaster.

In 1960, the total liabilities of FORTUNE 500 industrial companies—mostly short- and long-term debt—averaged 35% of assets; shareholders' equity made up the balance. At the end of last year the liabilities figure stood at nearly 55% (see chart on page 84). This shift toward greater leverage horrifies some leaders of the financial community, who are also uneasy about the debt many companies are piling on to thwart takeovers or to carry out leveraged buyouts. Much of the new debt, these critics note with dismay, takes the form of high-yield "junk" bonds.

Felix Rohatyn, a partner at the New York investment banking house of Lazard Frères, envisions a toppling of dominoes if the economy falters and corporate cash flows taper off. "Not only is this situation dangerous for the companies burdened with debt," he says, "but also to the institutions holding it."

Some chilling statistics suggest that the worriers have a point. According to the Federal Reserve Board, the debt of nonfinancial corporations rose $176 billion last year, to $1.3 trillion. Short-term debt, moreover, stood at a record 52% of total debt at the end of 1985's first quarter. On the face of it, this leaves companies more vulnerable than ever to a flare-up in interest rates. The rising indebtedness of companies not only seems risky in many ways, but even a bit perverse in the economic and political climate of the 1980s. A long-standing justification for leverage—inflation—is declining; borrowers can no longer look forward to repaying with fast-cheapening dollars. More serious, the cash flow from which most industrial companies repay may shrink if the Reagan Administration can enact its tax plan, which would kill the investment tax credit and stretch out depreciation write-offs.

RESEARCH ASSOCIATE *Wilton Woods*

However, long before managements push leverage to the 100% level, courting Chapter 11 proceedings, concern about creditworthiness will compel them to halt. Meanwhile, the rise in debt is not as serious as it appears. Decades of inflation have left assets on corporate balance sheets grossly undervalued—a fact well known to raiders. Hence, the shareholders' equity portion of capital is understated and the debt proportion exaggerated. Robert A. Taggart, a Boston University economist, says that when the market value of corporate assets is used in the comparison, corporate debt is a slightly smaller proportion of capital than in the early 1970s.

Nor is the growth in short-term debt necessarily cause for alarm. Many chief financial officers, convinced that interest rates will continue down, are holding off refinancing that debt with medium- and long-term bonds. So long as interest rates are falling, moreover, companies can service debt more cheaply than they could several years ago. Interest payments as a percentage of cash flow have actually fallen since the beginning of the decade.

Recent history provides the most telling argument for viewing the debt trend with comparative calm. The combination of events most feared by the Cassandras—soaring interest and a recession—occurred in 1981 and 1982. The prime rate on bank loans shot beyond 20% and business went through the worst slump since World War II. Bankruptcies rose, but most corporations stayed solvent by a wide margin.

Another slump could be more serious. But defenders of the trend to increased indebtedness say most companies, particularly those in high-growth industries, can safely live with it. Frederick Joseph, chief executive of Drexel Burnham Lambert, the leading underwriter of junk bonds, contends that any analysis of U.S. corporate debt has to be undertaken case by case. "Overall statistics on debt," he says, "are as useful as saying the planet on average is five feet underwater."

SOPHISTICATED new financial techniques have lessened the hazards of carrying debt. Clayton & Dubilier, a leveraged buyout firm in New York, commonly employs a combination of tactics to guard companies it takes private against interest rate hikes. It may arrange a "swap" and transfer the company's short-term interest obligations to another company that is overburdened with long-term obligations. It may also encourage the company to invest in financial futures, which have become widely used only in the past five years. By going short on Treasury bond futures, for instance, a company can earn enough to offset some of its added debt costs if interest rates shoot up. Says Joseph Rice, Clayton & Dubilier's president: "These instruments are available and a lot more people—the smart ones—are using them." Rice has been working out the details of a $1-billion leveraged buyout of Uniroyal Inc. by a group of investors.

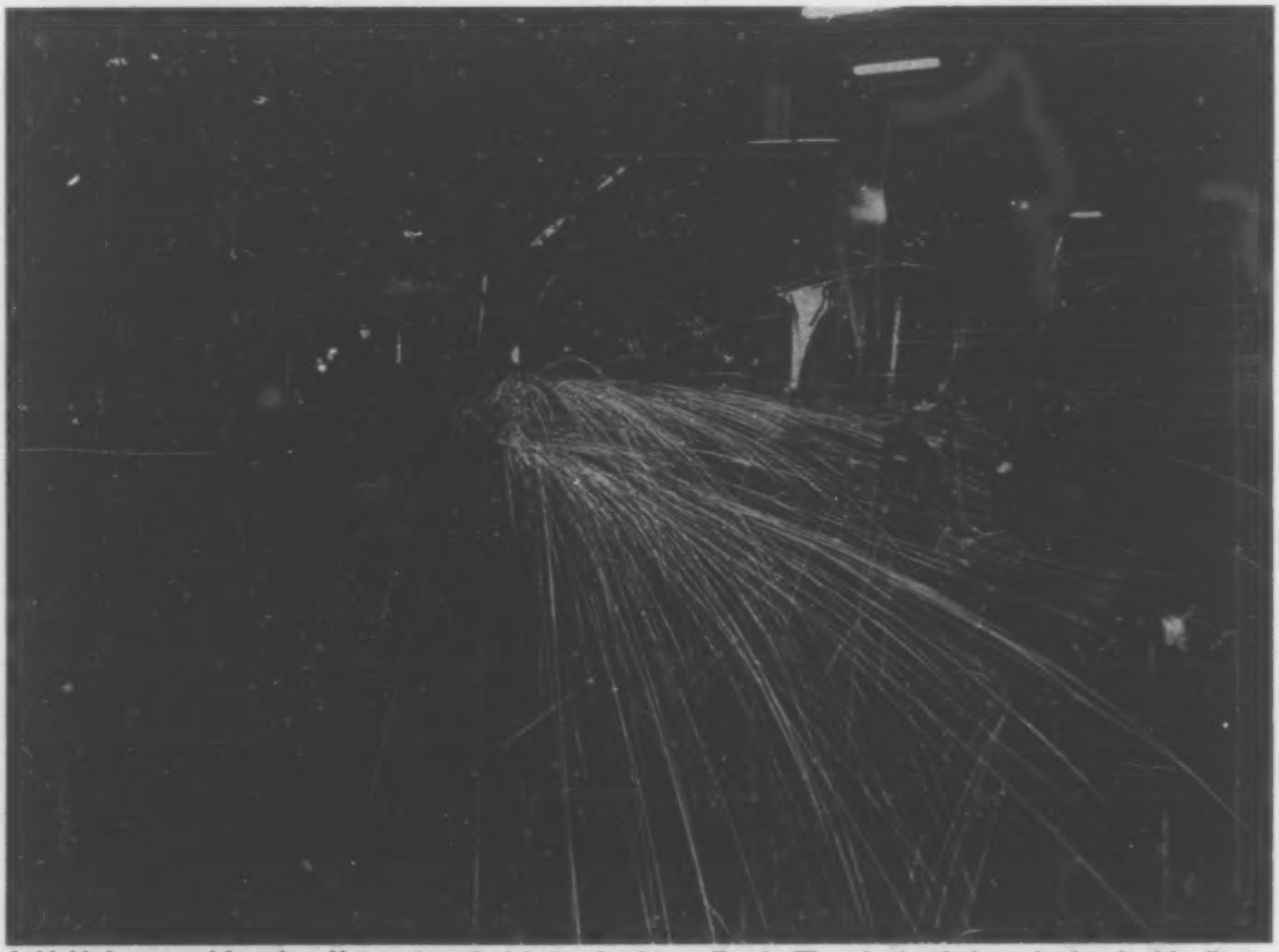
For some companies, increased leverage can be an unalloyed blessing. Stock buybacks by financially strong corporations in recent years, which often have had the effect of raising debt-to-equity ratios, have been a bonanza for shareholders who held on to their shares. A recent FORTUNE study (April 29) shows that over the decade through 1984, stockholders in companies that bought back shares enjoyed a far larger total return on their investments than stockholders in general. Kellogg Co., which had little long-term debt until last year, borrowed to buy in 20% of its shares. Since then the stock has zoomed 50% to a recent $59 a share, outpacing even the fast-rising group of food stocks.

Other companies go deeper into debt because they see long-term payoffs. They're building new plants to serve expanding markets or making acquisitions that they hope will boost profits. Monsanto, a St. Louis chemical company, says it would be prepared to raise long-term debt from 18% of capital to 30% to make a major acquisition. Betting that new products will emerge from its genetic engineering division, the company has been in the market for a large pharmaceutical company to distribute them.

PUSHED TOO FAR, leverage can of course be a curse. In speeches around the country, Securities and Exchange Commission Chairman John S.R. Shad recites a partial roster of companies that borrowed with bravado and then went bankrupt—Baldwin-United, Charter Co., Lionel, Saxon Industries, Wickes Cos. Saxon is now part of Alco Standard Corp. and Wickes recently emerged from Chapter 11 proceedings.

The specter of financial ruin also hovers over Rust Belt companies that have borrowed to modernize, expand, or merely hold on to market share. Many have been savaged by imports and by plunging demand for basic materials. "Some of the heavy users of debt are not the best users," says Donald W. Mitchell, a Cambridge, Massachusetts, management consultant. "Corporations that should have been trimming their sails have been borrowing a lot of money." Wheeling-Pittsburgh Steel, one of the most heavily leveraged companies in its industry, is in bankruptcy proceedings, and LTV Corp.'s net worth has sunk while long-term debt has soared. Phelps Dodge, a copper producer, took on more and more debt in the 1970s and early 1980s to finance modernization and pollution abatement equipment. Since then, with copper prices sagging, it has had to sell off chunks of the business to keep going.

Takeover battles have left a lot of companies mired in debt. Martin Marietta escaped the clutches of Bendix Corp., now part of Allied Corp., only by borrowing heavily to buy back its shares. Though the company has



At highly leveraged American Motors, *borrowing helped pay for robots at a Kenosha, Wisconsin, plant that's now shut down in a labor dispute.*

PHOTOGRAPH BY HEINZ KLUETMEIER

worked down its huge indebtedness by selling off big pieces of the business, interest costs ravaged earnings for several years. Merger mania in the oil industry has created huge and burdensome new obligations. Chevron Corp. is a long way from climbing out of the $12-billion debt hole it dug itself into during last year's purchase of Gulf Oil. Through restructurings financed by huge debt, Phillips Petroleum and Unocal Corp. have escaped the clutches of T. Boone Pickens. Debt-heavy oil companies live under a special kind of danger these days: interest payments will decimate their profits if oil prices plunge (see The Economy).

The high debt burdens of merger mania extend beyond companies under attack. Merely to make their balance sheets and cash flows less enticing to laser-eyed takeover artists, some managements have made major acquisitions of dubious merit. Fearing a raid, Chesebrough-Pond's, a Connecticut-based personal-products company, bought Stauffer Chemical in February for $1.25 billion, or 19 times estimated 1985 earnings. Chesebrough's debt went from about 45% of capital to 70%. Standard & Poor's, discerning few benefits from the merger, knocked the company's bond rating down from AA− to BBB. Overall, Standard & Poor's has downgraded the long-term debt ratings of 438 nonfinancial companies and has upgraded those of only 295 since the beginning of 1983.

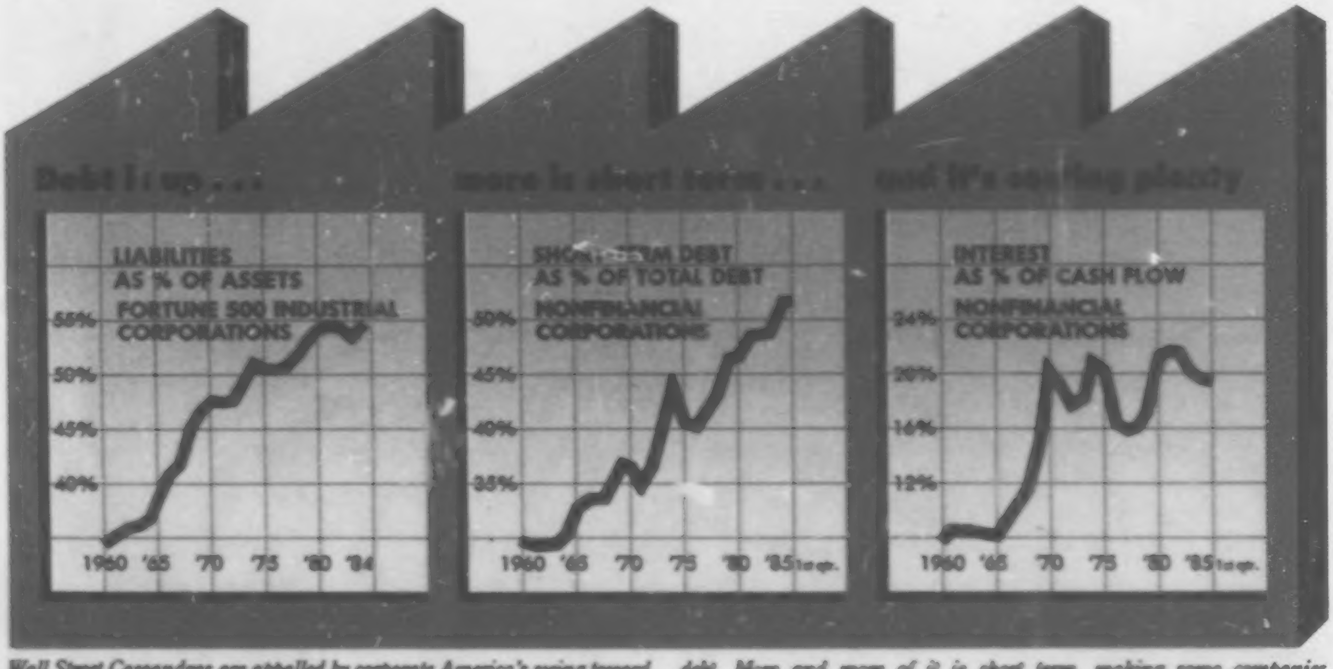
At first glance, companies involved in leveraged buyouts seem downright foolhardy. The buyouts are commonly accomplished with 10% to 20% equity and new debt consisting, more often than not, of junk bonds.

BECAUSE most bought-out firms go private, it's difficult to judge their performance. But most companies seem to have coped successfully, and for good reason: buyout specialists and their lenders have generally screened them for their ability to pay down debt. The great majority of companies have done so faster than expected, specialists in the field say. Dr Pepper slashed debt by selling off assets. Executives of Kohlberg Kravis Roberts & Co., the most prominent buyout firm, point to the record of several companies it bought in 1980 and 1981 and later took public or sold to public companies: PT Components, a maker of engine parts; Norris Industries, which produces construction and industrial products; and Lily-Tulip, the paper cup maker. Even though interest rates were spectacularly high during the period, all three companies paid down their debt substantially. PT Components, which went public early this year in a stock offering, reduced its long-term debt from $134 million in late 1981 to $85 million three years later.

A large debt load, contends Rice of Clayton & Dubilier, compels bought-out companies to operate more efficiently: they have to or they won't survive. Therefore, they control inventories and production costs rigorously, keep employment rolls lean, and hold down management perks. Says Rice, "You don't go around building lavish headquarters as a monument to your chairman."

Rice and others note that leveraged buyouts have resulted in extremely few bankruptcies. And they say that, unlike some corporate raiders who bid for companies with no intention of eventually operating them, buyout firms take a piece of the equity. Says Theodore Forstmann, a general partner at the buyout firm Forstmann Little & Co., "We are owners and we think like owners." In a philosophical vein he adds: "Every idea that's beneficial if used moderately and prudently is a menace if used imprudently."

That's exactly what's happening, some alarmists say, with junk bonds. They get the label because they are rated below "investment grade," Baa3 or BBB−, respectively, at Moody's and Standard & Poor's. Increasingly, they're turning up in takeovers as well as leveraged buyouts. Ted Turner's $5.4-bil-



Wall Street Cassandras are appalled by corporate America's swing toward higher leverage. As the chart at left shows, liabilities—mostly debt—have climbed steeply as a percentage of total corporate assets since the early 1960s. Critics of the trend also fret about the changing composition of the debt. More and more of it is short term, making some companies vulnerable to jumps in interest rates. As the chart at right demonstrates, interest expense has become a far greater burden than in the past; these days it's equal to a fifth of the average corporation's cash flow.

lion bid for CBS would be financed mostly with junk bonds. But because many takeover bids come to nought, far more junk bonds are brandished during the battles than are ever issued. Drexel Burnham estimates that only 12% of the junk bonds it issues wind up being used in takeovers. Drexel chief Joseph argues that most high-yield bonds, as his firm prefers to call them, serve as a valuable source of capital for companies that don't measure up at the bond-rating agencies—new or small companies without a long track record and once distressed companies that are making a comeback.

The nightmare of most top corporate executives is that their bonds might somehow fall to the lowly junk category. But an obsession with maintaining bond ratings, some financial experts say, unduly restrains many companies when taking on a somewhat larger debt load might be desirable and prudent. Robert H. Litzenberger, distinguished professor of finance at the Stanford Business School, is no advocate of heavy leverage. But he chides managers who "talk only about keeping their bond rating up by keeping debt down. In many cases that may not be the optimum course."

EVEN SOME top officials at the big rating agencies concede that certain financial managers may be unnecessarily timid about leverage. "We worry about the weaker companies whose debt is moving up a notch," says Solomon B. Samson, senior vice president for industrial ratings at Standard & Poor's. "But we know there's debt capacity out there, and some strong companies should be using more."

How much is too much? As long as debt remains well short of 100% of capital, the question is unanswerable. How much a company borrows, however, may depend less on abstract yardsticks of prudence than on the age of its chief financial officer. Economist Henry Kaufman, vice chairman of the diversified financial firm Phibro-Salomon Inc. and a foe of high leverage, blames much of it on a new breed of wrinkle-free financial managers weaned on junk-bond financing, two-tier buyouts, and the like.

Without doubt the younger crowd views debt far less harshly than its predecessors—many of whom retain a lingering memory of Depression horrors. Take Donald R. Kronenberger, the 64-year-old vice president and treasurer of Goodyear Tire & Rubber Co. Kronenberger recalls seeing soup lines stretching for blocks when he was growing up in Cleveland. He takes a dim view of debt and talks with genuine anxiety about Goodyear's flirtation with high leverage a decade or so ago. It was a time when the company was pumping capital into new, highly automated plants to compete with Michelin in the burgeoning radial-tire market.

Goodyear's debt as a percentage of capital reached 49%. The figure has fallen back to the 30% to 35% range in recent years—and Kronenberger sleeps a lot better. He's about to retire, and appears glad to be leaving before any newfangled notions take root at his company. He simply can't understand how financial managers live comfortably in the shadow of mountainous debt, and has a special aversion for leveraged buyouts. Says Kronenberger, "They are an idea that was created in hell by the devil himself." Many of the new breed of financial chiefs would find such views quaint, but that doesn't necessarily mean they intend to lead their companies to perdition.

THE DEBT BURDEN BY INDUSTRY

	LIABILITIES AS % OF ASSETS 1984	1974
Retailing	68.8%	58.6%
Utilities	64.3%	62.6%
Transportation	64.0%	63.6%
Metals	61.4%	48.6%
Aerospace	61.1%	62.0%
Petroleum refining	59.5%	49.9%
Drugs	58.6%	41.7%
Motor vehicles and parts	58.6%	50.4%
Food	56.4%	56.0%
Electronics	54.0%	55.5%
Forest products	52.6%	51.6%
Chemicals	52.2%	50.3%
Rubber	51.8%	57.0%
Textiles	45.9%	50.5%
Computers	44.9%	42.9%

The Debt Derby

Debt is up in most sectors of industry on FORTUNE*'s 500 lists, but it's higher in some sectors than in others. Retailers are tops in liabilities because of a multitude of long-term store leases. Computer companies rank last.*

THE MOST DEBT-BURDENED OF THE TOP 100 INDUSTRIAL CORPORATIONS

	LIABILITIES AS % OF ASSETS
American Motors	94.8%
Coastal	82.5%
Control Data	81.5%
LTV	80.3%
Ashland Oil	79.0%

THE LEAST DEBT-BURDENED

	LIABILITIES AS % OF ASSETS
Digital Equipment	28.9%
American Home Products	31.1%
Hewlett-Packard	31.2%
Eastman Kodak	33.8%
Bristol-Myers	33.9%

Letting Go—and Holding Back

Aside from International Harvester—whose liabilities exceed assets—American Motors was the most leveraged of the major industrial corporations at the end of 1984. The company borrowed heavily from its French partner, Renault, to introduce a new compact car to the U.S. market. Control Data has a subsidiary, Commercial Credit, that tilts its liabilities upward. Ashland Oil has since improved its balance sheet. The conservative companies on the list at right carry little or no long-term debt.

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COKE'S ABOUT-FACE

THE BRAND-LOYALTY LESSON

THE FALL OF STEVE JOBS

BEHIND THE SCENES AT APPLE COMPUTER

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NBC'S AMAZING COMEBACK

THE BOOM IN EXPENSIVE CARS

U.S. EXPORTERS: FORTUNE'S TOP 50

FORTUNE

FORTUNE
THE FALL OF STEVE JOBS

Ed Kashi's cover photo shows the man who lost the battle at Apple. See page 20.

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THE 50 LEADING EXPORTERS

THE FORTUNE DIRECTORY OF THE LARGEST U.S. INDUSTRIAL EXPORTERS

General Motors heads the list for the third year running, though Ford and Chrysler are gaining ground. Computer makers also starred. But a dollar that just kept getting stronger conspired against most American companies selling wares abroad.

THE STRONG DOLLAR continues to hurt many of the companies on FORTUNE's annual list of the 50 largest U.S. industrial exporters. The top 50, led for the third year in a row by General Motors, managed to nudge up exports by a mere $5 billion last year, to just under $65 billion. Boeing, which headed the list from 1979 until 1981, slumped badly in 1984, dropping from second to fourth place on a 25% decline in exports. The aircraft company is still recovering from a big reduction in orders during the recession of 1981 and 1982, and the orders it has tend to be for relatively inexpensive planes. Westinghouse Electric (down 19%) and Signal Cos. (down 13%) were the other big percentage losers.

Three victims of the strong dollar and soft overseas markets—Mobil, A.E. Staley Manufacturing, and Engelhard—disappeared from the 1984 list altogether. R.J. Reynolds, which didn't publish export sales figures for last year, was also dropped from the rankings. Rockwell, absent from the list since 1982, reappeared as No. 45—despite a less than spectacular year: its 1984 exports were $107 million below 1982's. Xerox made its debut on the list this year in the 44th slot. Combustion Engineering, No. 47 in 1982, returned in 48th place after a year's absence. Motorola, which was left off last year's list because it didn't issue complete data for 1983, showed up in 16th place this year.

The Big Three automakers increased exports sharply—they rose from 12% for GM to 30% for Chrysler. The carmakers generally export more parts than completed vehicles. They sell so-called knockdown units—body panels, doors, hoods, and fenders—to their assembly plants in Canada, Mexico, and Europe.

Computer companies also had a fair share of good news. IBM, fifth on the list, increased export sales by over 35%, topping the $3-billion mark. Digital Equipment zoomed from 24th to 13th place, raising overseas sales by 39%. Burroughs (No. 32) scored the largest percentage gain of any company on the list, bringing sales up 47% to $592 million. The company attributes the increase to strong demand for its large mainframe computers and for two relatively new microcomputers. Says Kenn George, director general of the Commerce Department's U.S. and foreign commercial service: "Companies are using America's superior technology to build a better product and are doing a better job of marketing that product." But the computer companies may be in for tough times this year. Sales have slumped domestically and security analysts expect a leveling off abroad.

Overall, the trade balance has never been tilted further against the U.S. The foreign trade deficit reached a high of $123.3 billion last year. The Commerce Department predicts the gap will widen by $25 billion to $30 billion this year, largely because of the strong dollar, a growing U.S. economy that's attracting imports, and the indebtedness that keeps developing countries from buying lots of U.S. goods. America's trade deficit with Japan alone soared to $36.8 billion last year, despite an 8% rise in U.S. exports to that country—mainly computers, chemicals, and corn. The U.S. trade deficit with Canada hit $20.4 billion, and with Taiwan $11.1 billion.

Exports to the two Communist superpowers rose. U.S. sales to the Soviet Union climbed to $3.3 billion, close to the 1979 high of $3.6 billion. The Soviets mainly bought agricultural chemicals and machinery, metalworking equipment, and scientific instruments. U.S. exports to the People's Republic of China jumped $1 billion, to $4 billion. In one of the larger deals GE (No. 3) sold China 220 locomotives worth about $230 million.

Despite the mountainous trade deficit, the U.S. still leads the world in total exports. Until last year, American companies set up subsidiaries called domestic international sales corporations (DISCs) to handle export sales. Part of the income from these sales was sheltered from U.S. taxes if the proceeds were invested in U.S. facilities making goods for export. But America's trading partners, arguing that DISCs were merely paper corporations, complained that the U.S. government was unfairly subsidizing exporters. Since then the government has discouraged DISCs by raising taxes on them.

This year Congress inaugurated a new system to increase exports: U.S. companies can set up foreign sales corporations (FSCs). These are true subsidiaries established outside the U.S. and employing at least one director who lives abroad. While the red tape involved can be formidable, companies with FSCs can exempt 15% to 32% of their export profits from taxes—and can spend the sheltered income any way they wish. U.S. exporters aren't likely to score major gains overseas as long as the dollar rides high, but at least they have an incentive to keep their eyes on foreign markets.

RESEARCH ASSOCIATE *Katharena Leanne Zanders*

RANK		COMPANY	PRODUCTS	EXPORTS	PERCENT CHANGE	FORTUNE 500		EXPORTS AS PERCENT OF SALES	
						SALES	RANK		
'84	'83			$000	1983-1984	$000		PERCENT	RANK
1	1	**General Motors** (Detroit)	Motor vehicles & parts, locomotives, diesel engines	7,276,500	12.06	83,889,900	2	8.67	38
2	3	**Ford Motor** (Dearborn, Mich.)	Motor vehicles & parts	6,041,000	27.66	52,366,400	4	11.54	28
3	4	**General Electric** (Fairfield, Conn.)	Aircraft engines, generating equipment, locomotives	3,935,000	−6.95	27,947,000	9	14.08	18
4	2	**Boeing** (Seattle)	Commercial aircraft	3,621,000	−24.66	10,354,000	29	34.97	1
5	7	**International Business Machines** (Armonk, N.Y.)	Information-handling systems, equipment & parts	3,074,000	35.12	45,937,000	6	6.69	43
6	9	**Chrysler** (Highland Park, Mich.)	Motor vehicles & parts	2,706,900	30.23	19,572,700	14	13.83	19
7	6	**E.I. du Pont de Nemours** (Wilmington, Del.)	Chemicals, fibers, polymer & petroleum products	2,650,000	15.07	35,915,000	7	7.38	42
8	5	**United Technologies** (Hartford)	Aircraft engines, helicopters, air-conditioning equip.	2,387,810	0.18	16,331,757	16	14.62	16
9	8	**McDonnell Douglas** (St. Louis)	Aircraft, missiles, space systems	2,133,700	1.38	9,662,600	34	22.08	5
10	10	**Eastman Kodak** (Rochester, N.Y.)	Photographic equipment & supplies	1,949,000	10.36	10,600,000	28	18.39	9
11	11	**Caterpillar Tractor** (Peoria, Ill.)	Construction equipment, diesel engines & turbines	1,768,080	11.62	6,576,000	52	26.89	2
12	13	**Hewlett-Packard** (Palo Alto, Calif.)	Computers, electronic equipment	1,420,000	28.51	6,044,000	60	23.49	4
13	24	**Digital Equipment** (Maynard, Mass.)	Computers & related peripheral equipment	1,136,030	39.01	5,584,426	65	20.34	7
14	12	**Westinghouse Electric** (Pittsburgh)	Generating equipment, defense systems	1,129,095	−18.72	10,264,500	30	11.00	30
15	17	**Union Carbide** (Danbury, Conn.)	Chemicals, industrial & high technology products	1,115,000	20.41	9,508,000	35	11.73	26
16	●	**Motorola** (Schaumburg, Ill.)	Semiconductors, radio communications equipment	1,062,000	20.14	5,534,000	67	19.19	8
17	14	**Philip Morris** (New York)	Tobacco products, soft drink ingredients, beer	1,053,000	−2.86	10,137,800	32	10.39	32
18	16	**Exxon** (New York)	Petroleum, chemicals	1,013,000	1.91	90,854,000	1	1.11	50
19	20	**Monsanto** (St. Louis)	Herbicides, chemicals, polymer products, fibers	950,000	8.08	6,691,000	51	14.20	17
20	15	**Signal Cos.** (La Jolla, Calif.)	Engines, chemicals, audio-video systems	890,000	−13.17	6,005,000	61	14.82	15
21	19	**Archer Daniels Midland** (Decatur, Ill.)	Soybean oil, flour, corn byproducts	883,253	−1.97	4,906,962	74	18.00	10
22	25	**Occidental Petroleum** (Los Angeles)	Agricultural chemical products, coal	882,000	9.84	15,373,000	18	5.74	45
23	18	**General Dynamics** (St. Louis)	Tanks, aircraft, missiles, gun systems	876,900	−3.73	7,839,000	44	11.19	29
24	21	**Weyerhaeuser** (Tacoma, Wash.)	Logs, pulp, paperboard, newsprint, lumber	871,080	0.11	5,549,738	66	15.69	14
25	23	**Dow Chemical** (Midland, Mich.)	Chemicals, plastics, magnesium metal	851,000	3.27	11,418,000	25	7.45	41
26	22	**Northrop** (Los Angeles)	Aircraft, electronic equipment, technical services	806,600	−2.55	3,687,800	106	21.87	6
27	26	**Raytheon** (Lexington, Mass.)	Electronic defense systems, aircraft	784,000	0.13	6,104,159	58	12.84	22
28	30	**Lockheed** (Burbank, Calif.)	Aircraft	753,000	26.77	8,113,400	43	9.28	34
29	27	**ITT** (New York)	Logs, cellulose pulp	743,000	0.58	14,000,988	21	5.31	46
30	29	**Allied** (Morris Township, N.J.)	Medical instruments, connectors, fibers, chemicals	678,000	6.44	10,864,000	26	6.24	44
31	28	**Dresser Industries** (Dallas)	Compressors, pumps, oil field equipment	606,000	−5.60	3,732,400	104	16.24	13
32	43	**Burroughs** (Detroit)	Data processing & business equipment	591,700	47.01	4,808,300	76	12.31	24
33	33	**Minnesota Mining & Manufacturing** (St. Paul)	Electronic, industrial, health & graphics products	576,000	8.68	7,705,000	45	7.48	40
34	35	**Celanese** (New York)	Fibers & chemicals	547,000	11.63	3,328,000	120	16.44	11
35	37	**Deere** (Moline, Ill.)	Farm & industrial equipment	546,000	22.15	4,399,168	86	12.41	23
36	32	**Honeywell** (Minneapolis)	Electronic components, control systems, computers	540,000	0.56	6,138,300	56	8.80	37
37	44	**Sperry** (New York)	Computer systems, electronics, farm equipment	524,900	30.80	5,237,900	69	10.02	33
38	38	**Aluminum Co. of America** (Pittsburgh)	Aluminum, alumina	486,600	10.27	5,750,800	62	8.46	39
39	34	**Emerson Electric** (St. Louis)	Electronic & electromechanical components	483,300	−3.71	4,178,810	93	11.57	27
40	36	**FMC** (Chicago)	Defense equipment, chemicals	453,351	−6.10	3,337,800	119	13.58	20
41	31	**Phillips Petroleum** (Bartlesville, Okla.)	Liquefied natural gas, chemicals, plastics	448,000	−3.66	15,537,000	17	2.88	49
42	42	**International Paper** (New York)	Pulp, paper & wood products	424,000	4.18	4,715,600	80	8.99	36
43	39	**Textron** (Providence)	Helicopters, aerospace products, pens	416,000	1.42	3,221,100	122	12.91	21
44	●	**Xerox** (Stamford, Conn.)	Duplicators, copiers, electronic typewriters	413,700	18.00	8,971,300	38	4.61	47
45	●	**Rockwell International** (Pittsburgh)	Electronics equipment, automotive components	412,000	17.71	9,322,100	37	4.42	48
46	45	**Int'l Minerals & Chemical** (Northbrook, Ill.)	Potash, phosphates, industrial minerals	406,000	3.23	1,546,300	231	26.26	3
47	46	**Ingersoll-Rand** (Woodcliff Lake, N.J.)	Drills, compressors, pumps, bearings, tools	403,800	4.31	2,478,120	151	16.29	12
48	●	**Combustion Engineering** (Stamford, Conn.)	Steam generators, oil & gas exploration equipment	373,224	6.58	3,057,520	133	12.21	25
49	48	**Kaiser Aluminum & Chemical** (Oakland, Calif.)	Aluminum products, specialty chemicals	369,100	0.41	3,478,000	114	10.61	31
50	50	**Borg-Warner** (Chicago)	Air-conditioning equipment, auto parts, chemicals	362,500	0.58	3,915,600	99	9.26	35
		TOTALS		**64,822,963**		**662,491,248**			

● Not on last year's list

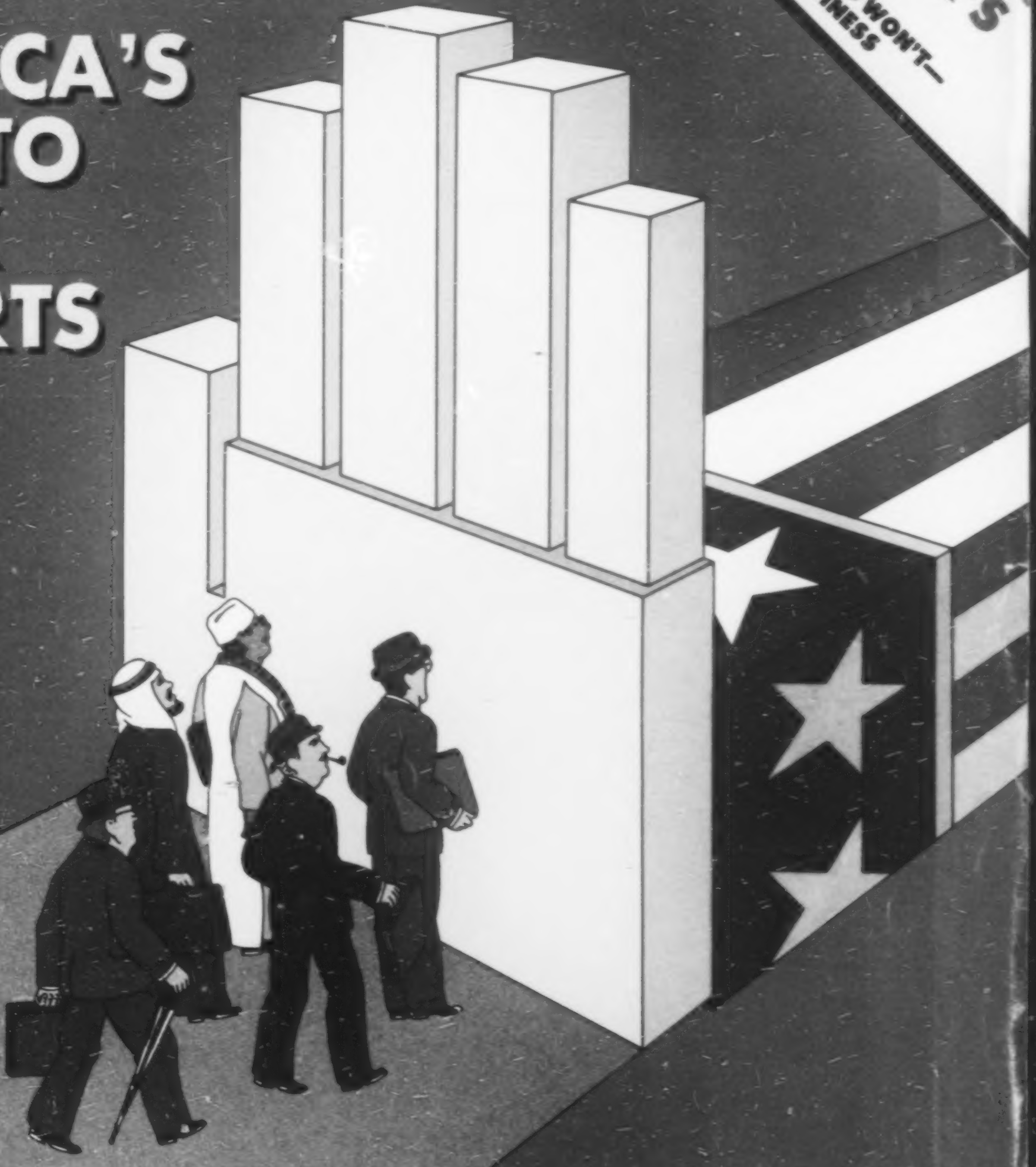
AUGUST 19, 1985

FORTU

$3.50

THE DOLLAR'S DROP
WHAT IT WILL—AND WON'T— DO FOR BUSINESS

AMERICA'S PUSH TO BLOCK IMPORTS



DUN & BRADSTREET'S SPENDING SPREE

RETAILING'S LATEST SUPERSTAR KNOWS WHAT WOMEN WANT

FORTUNE'S INTERNATIONAL 500: BIG BUSINESS OUTSIDE THE U.S.

AUGUST 19, 1985
VOL. 112, NO. 4

FORTUNE

FORTUNE
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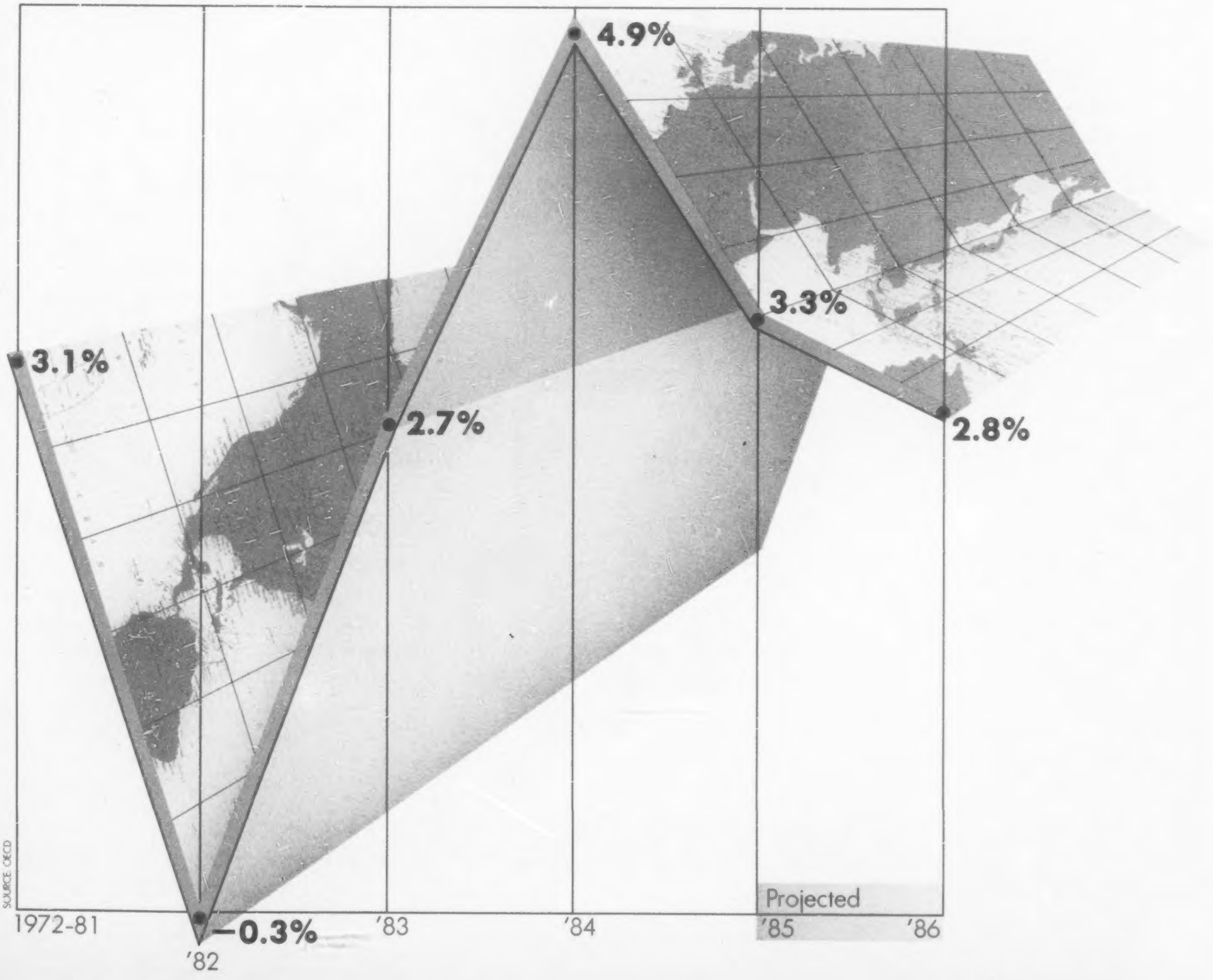
THE WORLD SHIFTS TO

The American economy is shifting from a high-speed hustle to a sedate waltz, and the effects will be felt worldwide. Last year's roaring growth produced something for everyone. The recovery remained virtually inflation free and kicked off new growth in both industrial and developing countries. The other 23 countries of the Organization for Economic Cooperation and Development—the major industrial nations—got about half their growth last year from exports to the U.S. Now demand in these countries is expected to pick up. If it doesn't, the world recovery could lapse into a two-step.

The U.S. economy looks less lustrous because the surge in demand for consumer goods and capital equipment helped push the trade balance out of whack. Furthermore, an epic federal budget deficit attracted a rush of capital from abroad, much of it from economies flush with export earnings. This race into dollars lofted the currency, making imports still more attractive

GNP growth Percent change for the 24 OECD countries



SOURCE: OECD

INTENTIONAL
BLANK

A SLOWER TEMPO

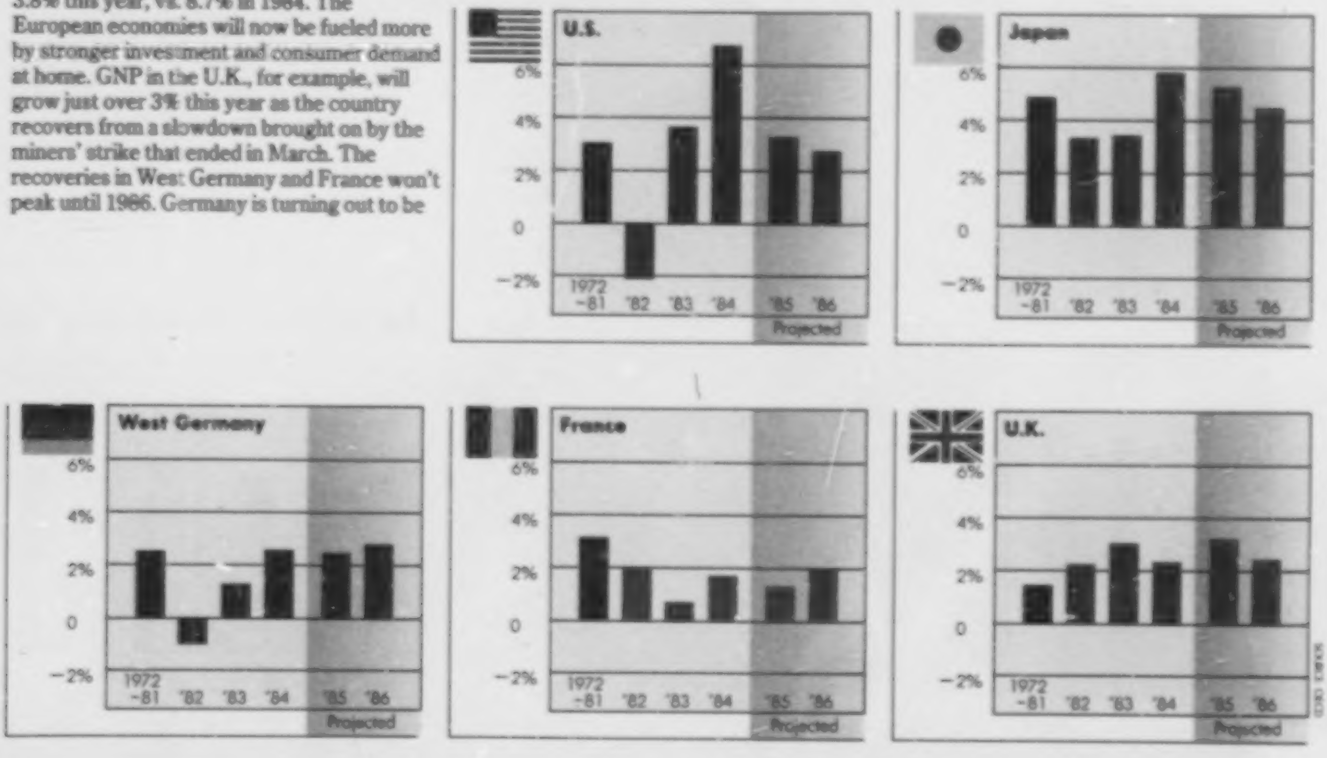
and bloating the current account deficit to a projected figure of almost $120 billion this year. The capital inflow will likely make the U.S. a debtor nation in 1985—the first time that's happened since World War I.

Some of these imbalances have begun to correct themselves, as the charts on these and the following pages show. The trade deficit has sapped growth in the U.S., and waning confidence in the economy has made the dollar less almighty. For the U.S. and most of its trading partners, a weaker dollar is desirable and long overdue (see The Economy). It gives European countries the chance to stimulate investment by cutting their own interest rates, which they have kept high to prop up their currencies. A dollar that doesn't just sag but plunges, however, would force the U.S. to raise interest rates again, spurring inflation. Trading partners would have a lot more confidence in the U.S. if it could control the swollen federal budget deficit.

The Recovery Loses Some Get-Up-and-Go

America's main trading partners will follow the U.S. pattern of recovery, some lagging just a little, others a lot. Adjusted for inflation, the average growth of the European OECD economies will be just 2.25% this year and next. In 1984 exports to the U.S. accounted for about half the increase in European output. But the U.S.'s appetite for consumer goods and capital equipment has waned; total demand is projected to grow just 3.8% this year, vs. 8.7% in 1984. The European economies will now be fueled more by stronger investment and consumer demand at home. GNP in the U.K., for example, will grow just over 3% this year as the country recovers from a slowdown brought on by the miners' strike that ended in March. The recoveries in West Germany and France won't peak until 1986. Germany is turning out to be the most stable of the industrial trading partners. GNP growth is expected to slow only half a percentage point this year, then pick up again in 1986 as exports continue to increase at a vigorous rate. Japan's vulnerability to a cooling U.S. economy will show up much more quickly because of the strong, if controversial, trade link between the two countries. Last year Japan sent 35% of its exports to the U.S., vs. 24% in 1980.

GNP growth Percent change for five industrial countries



RESEARCH FOR CHARTS: ROSALIND KLEIN BERLIN

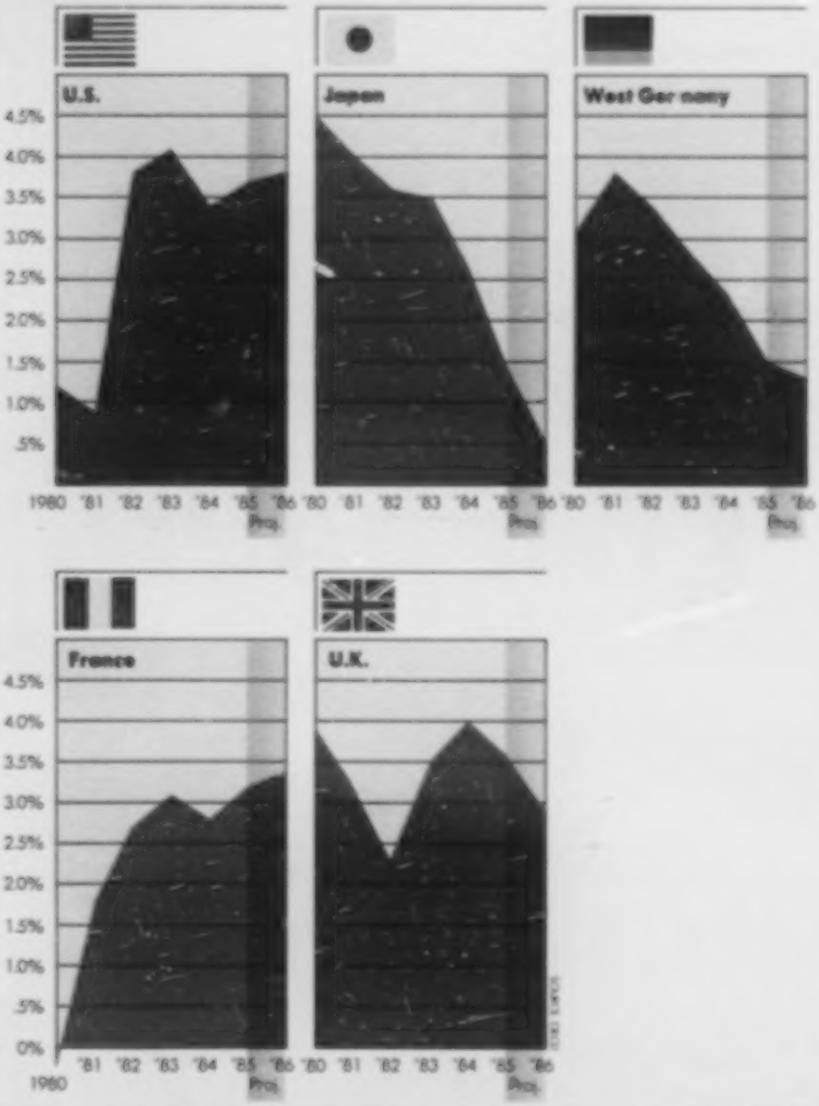
DESIGN AND ILLUSTRATIONS BY LLOYD MILLER

The Last of the Big Spenders

Heavy government spending helped fuel the U.S. recovery—but created a deficit that, as a proportion of GNP, surpasses those of welfare states like the U.K. and France. The charts below, which reflect the combined balances of local, state, and federal governments, disguise the magnitude of central government spending. In Germany, for example, last year's federal budget deficit of $9.9 billion equaled 1.6% of GNP; deficits in state and social security budgets brought the total to 2.3%. In the U.S., by contrast, state and local government surpluses will offset a portion of the $190-billion federal budget deficit for calendar 1985. In fact, Washington's big spenders are responsible for a federal deficit that is approaching 5% of GNP. And if Congress and the Reagan Administration aren't able to reconcile their differences on next year's spending, the figure will get even bigger.

Government deficits

Percent of GNP

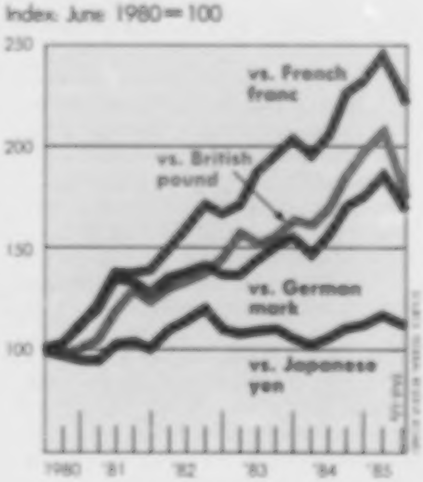


Superbuck Takes a Tumble

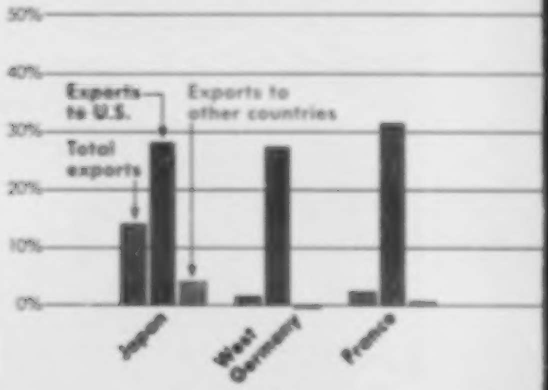
The slowing U.S. economy has sent the dollar on the longest and steepest drop since 1980. Between its peak in February and mid-July, the dollar fell 15% against a market basket of major currencies. However, that was still 66% above its mid-1980 level. The long decline of key currencies against the dollar wasn't fully reflected in export prices: exporters to the U.S. let prices rise, fattening profit margins, while U.S. exporters couldn't afford to mark down goods enough to keep competitive.

The dollar

Against four other currencies



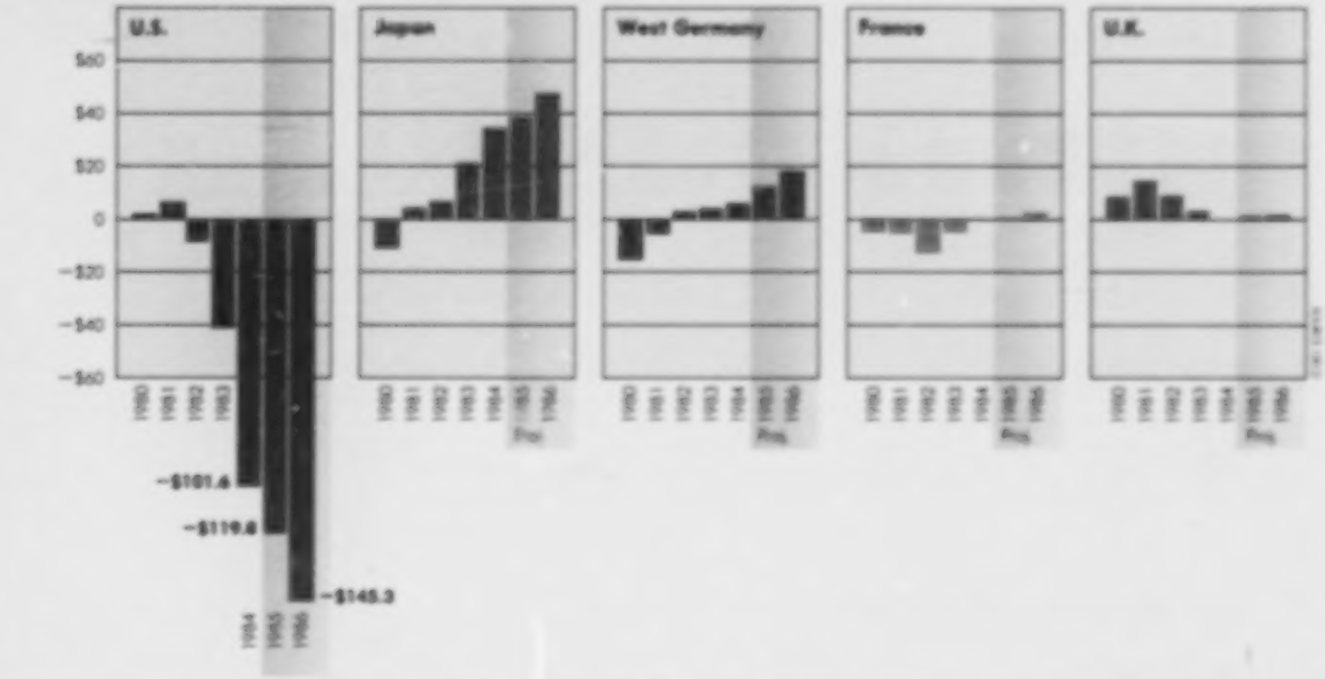
Merchandise exports

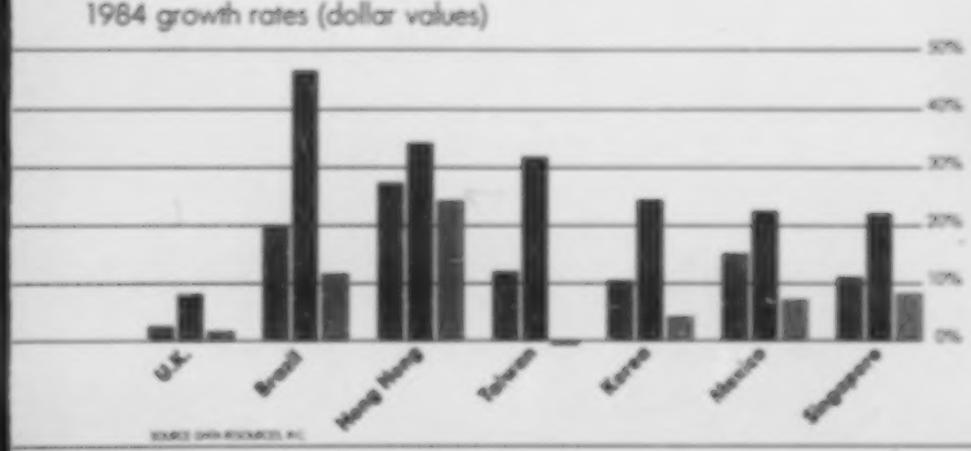


Topsy-Turvy Trade

Even before the dollar took flight into the stratosphere, strong consumer and business demand for imports steered the U.S. toward a trade deficit. These charts, which show changes in the trading partners' balance on current account (exports of goods and services minus imports), hide one small piece of good news for the U.S.: exports are actually growing. But imports are growing faster. The balance of trade on goods deteriorated 76% last year and will continue to slide 9% this year and 16% next. And the balance in services is worsening: this year's surplus will be about one-quarter of the 1983 level, partly because of heavy interest payments on foreign capital invested in the U.S. The current account balance, as a result, will widen by some 20% this year.

Balance of payments Current account (surplus/deficit in billions of dollars)





SOURCE: DATA RESOURCES INC.

America's Buying Spree

The enormous U.S. demand for imports generated an export boom last year for other countries. Among the biggest beneficiaries: Japan (autos and electronics) and Mexico (oil and food products). Total exports to the U.S. climbed 26%, vs. a 6% increase worldwide. As the U.S. recovery flags, this boom could become a sputter. Developing countries are in a particularly precarious position. If other markets don't absorb their exports, they will have a hard time servicing their mounting external debt.

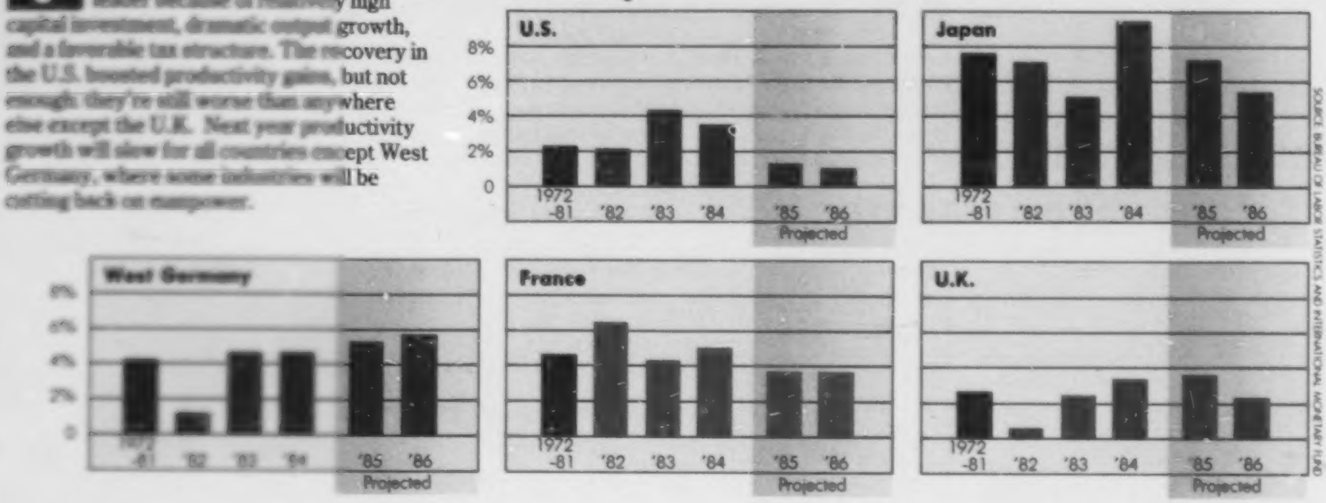
Chasing Japan

Japan remains the world productivity leader because of relatively high capital investment, dramatic output growth, and a favorable tax structure. The recovery in the U.S. boosted productivity gains, but not enough: they're still worse than anywhere else except the U.K. Next year productivity growth will slow for all countries except West Germany, where some industries will be cutting back on manpower.

Productivity

Output per worker-hour in manufacturing

Percent change



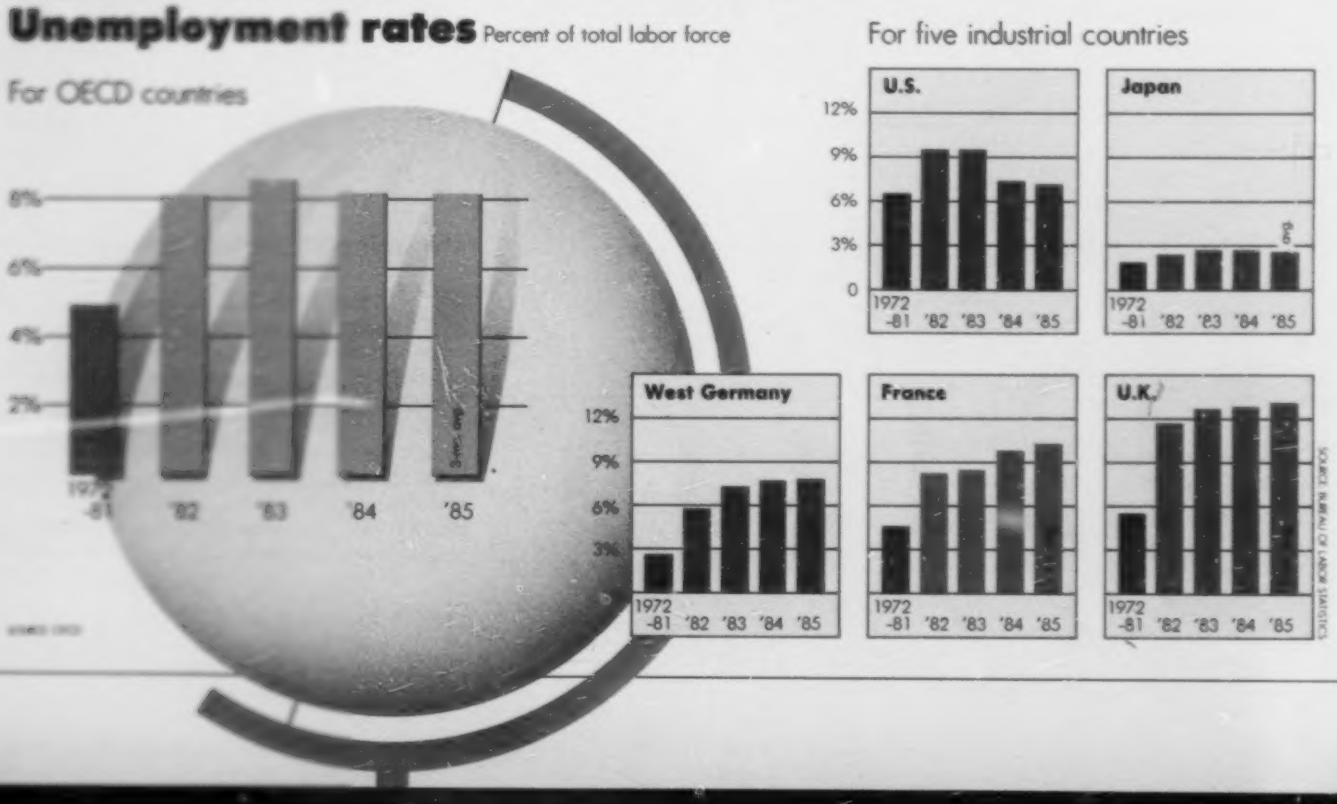
SOURCE: BUREAU OF LABOR STATISTICS AND INTERNATIONAL MONETARY FUND

Help Not Wanted

The recovery isn't doing much for the armies of the unemployed in most OECD countries. Total employment in Europe rose in 1984 after four straight years of decline. Yet the number of new jobs hasn't matched growth in the labor force, so unemployment remains the highest in 50 years. Even though demand is picking up, European employers are reluctant to hire because of restrictions on layoffs that make overstaffing costly in a downturn. The U.S. is faring better: last year's exuberant expansion shrank unemployment two percentage points, and the growth of service jobs is keeping it from creeping up now. Japan—of course—is faring best of all.

Unemployment rates

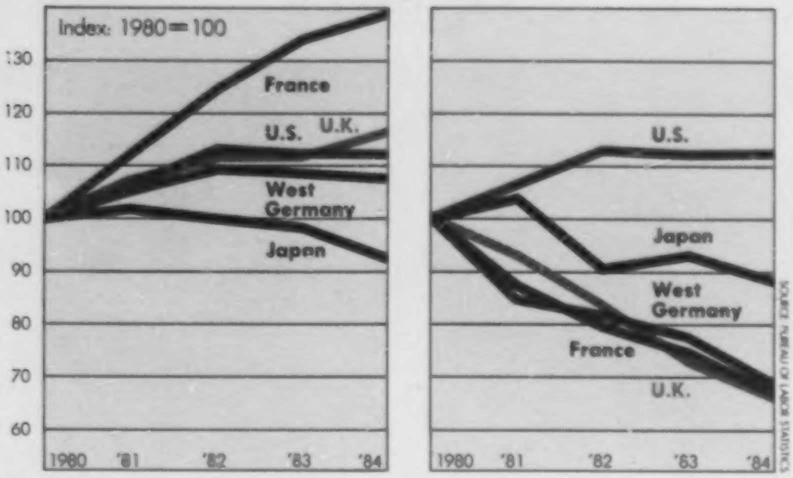
Percent of total labor force



SOURCE: OECD

SOURCE: BUREAU OF LABOR STATISTICS

Unit labor costs



Based on each nation's currency

Based on U.S. dollars

SOURCE: BUREAU OF LABOR STATISTICS

Keeping Labor Costs at Bay

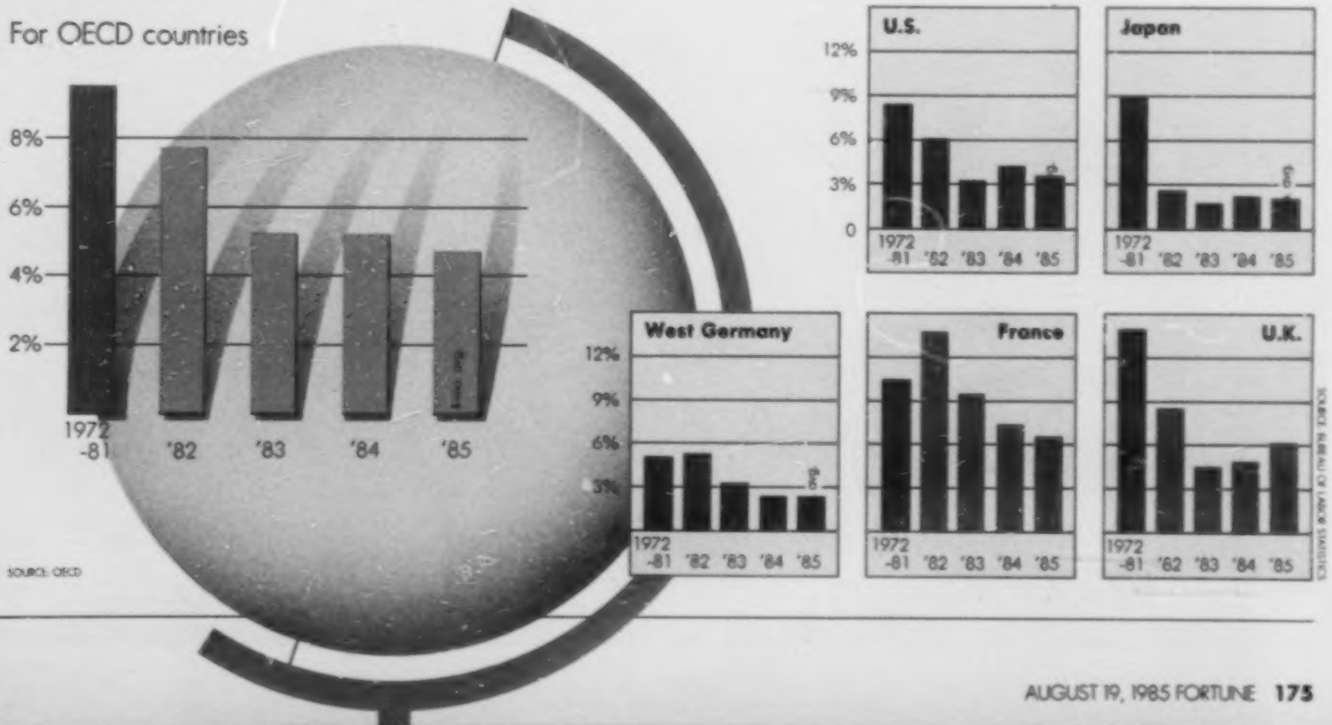
Wage increases lost much of their zip in most industrialized countries last year as union membership declined, unemployment rose, and inflation eased. In the U.S., wage settlements were the lowest in 17 years. But the strong dollar prevented that from helping the country's competitive position: measured in dollars, unit labor costs among U.S. trading partners have been falling while America's have held steady. Japan's relative costs are also inflated in the world marketplace, since the yen has been stronger than European currencies. Measured in their own currencies, unit labor costs in France and the U.K. have been climbing, although France's cost spiral is tapering off as the French chip away at their wage indexation.

Leaving Inflation Behind

Breaking with the past, this recovery left inflation at the starting gate. Weak oil and other commodity prices, along with tight monetary policies and wage restraint, kept consumer price increases in the OECD countries lower than in the recession year of 1982. Prices increased moderately even in countries whose currencies weakened against the dollar. Usually a depreciating currency boosts inflation as import prices rise, and as industry produces more goods for export and fewer for home consumption. But domestic demand in Europe and Japan hasn't been strong. The U.S. followed a more predictable pattern; cheaper imports helped hold down all consumer prices. ■

Inflation

Percent change in consumer prices



For OECD countries

SOURCE: OECD

For five industrial countries

SOURCE: BUREAU OF LABOR STATISTICS

THE WORLD'S LARGEST INDUSTRIAL CORPORATIONS

Most of them had a good year for a change. U.S. automakers thrived. European and Japanese manufacturers fed the U.S. appetite for imports. But while oil companies still dominate the list, some big ones recorded drab profits. And whatever became of steel?

THE NEW LIST of the world's largest industrial corporations displays a distinct brightening after two gray years. For the first time since 1978, both sales and profits increased. Measured in dollars, sales rose 7% and net profits a heartening 28%. These improved results reflect the world recovery, which lagged behind the U.S. recovery in 1983. In 1984 the volume of world trade reached an all-time high.

The strength of the dollar in 1984 had both push-down and pull-up effects on sales and earnings figures of non-U.S. companies on the list. On the push-down side, gains from 1983 to 1984 shrank when translated from home currencies into dollars, especially for European companies. As measured in pounds, for example, Royal Dutch/Shell had a 20% increase in sales; as measured in dollars, sales were up only 5%. Philips' Gloeilampenfabrieken, the big Dutch electronics manufacturer, had a 24% increase in sales in guilders, but that reduced to a 10% increase in dollars.

On the pull-up side, the strong dollar made imports into the U.S. less expensive, and attractive prices lifted demand for imported goods. That helped sales and earnings for many European and Japanese companies. Exports to the U.S. accounted for more than half the big increase in world trade from 1983 to 1984.

Japanese products did particularly well. Japan's consumer electronics exports to the U.S. rose an impressive 65%, and that doesn't include products made in the U.S. by Japanese subsidiaries. Matsushita Electric Industrial, Japan's largest electronics company, accounted for 42% of the U.S. videotape recorder market, selling under its popular name brands Panasonic and Quasar. That competitive success contributed to Matsushita's remarkable rise from No. 39 in 1982 to No. 21 on this year's list.

Despite oil industry woes brought on by oversupply and soft prices, petroleum companies still dominate the list. The number of big players continues to grow, with OPEC-country producers Kuwait Petroleum and Petróleos de Venezuela making the list for the first time. Kuwait Petroleum (No. 37) reported a 39% increase in sales; it owes the gain mostly to the purchase of Gulf's retail network in northern Europe. Petróleos de Venezuela (No. 45) benefited from an increase in demand for heavy crude, partly because of the British coal strike. With sales of subsidiaries consolidated, Nippon Oil joins the list as No. 38.

But for many oil companies 1984 was a drab year. Those that appear on the list both last year and this year show a combined profit increase of only 4%. Three U.S. oil producers, Mobil, Texaco, and Chevron, reported decreases in profits. Texaco fared the worst, with a painful drop of 75%.

U.S. auto manufacturers had a rousing year. New-car sales climbed 17% over 1983, thanks partly to import restraints that allowed only a 2% rise in sales of new-car imports. Ford, which moved past British Petroleum to rank fifth, increased sales 18%. Chrysler enjoyed a sensational surge from No. 44 to No. 22 on a sales increase of $6.3 billion, a 48% gain. Toyota and Nissan, the leading non-U.S. carmakers, both edged up. European carmakers fared less well. Volkswagenwerk, Daimler-Benz, and Fiat all retreated at least one notch, and both Renault and Volvo dropped off the list altogether.

The Big Three U.S. car manufacturers were three big winners on the profit side. GM and Ford reported net profit gains of 21% and 56%. Chrysler reported a leap of 240%, to a new record high. Almost half its lofty earnings, though, came not from the marketplace but from investment tax credits and tax-loss carry-forwards.

Among the big losers on last year's list, only one shows a loss for 1984: ENI, the Italian state-owned oil company (No. 14). ENI blames losses on foreign exchange dealings in the oil market combined with continuing red ink from the chemicals division. U.S. Steel (No. 25), the largest American money loser on last year's list, reported profits for 1984. Even more than Chrysler's, however, these gains are attributable to the miracle of accounting rather than increased sales.

Since 1974, when FORTUNE first published its list of the world's largest industrial corporations, rankings have changed considerably. For all their recent success, U.S. automakers have lost ground over the years. On that first list, GM, Ford, and Chrysler ranked 1, 3, 5. This year they're 3, 5, 22. There were 12 oil companies in 1974; now there are 21, and the two biggest among them rank No. 1 and No. 2 on the list.

In 1974, when a steel mill still seemed to epitomize industrial might, five steel companies made it; this year the industry has only one forlorn representative, the Italian conglomerate IRI (No. 17). Government-owned IRI does a lot of things, mostly unprofitable; its biggest line of business, though, is metal manufacturing. U.S. Steel still goes by its old name and still makes steel, but it is focusing more on oil in the 1980s, following the purchase of Marathon Oil in 1982. Currently 33% of revenues are derived from steel and 53% from oil and gas.

—Barbara C. Loos and Dennis J. Moulton

THE 50 LARGEST INDUSTRIAL CORPORATIONS RANKED BY SALES

RANK '84	'83	COMPANY	HEADQUARTERS	INDUSTRY	SALES $000	NET INCOME $000
1	1	**Exxon**	New York	Petroleum refining	90,854,000	5,528,000
2	2	**Royal Dutch/Shell Group**	The Hague/London	Petroleum refining	84,864,598	4,872,148
3	3	**General Motors**	Detroit	Motor vehicles and parts	83,889,900	4,516,500
4	4	**Mobil**	New York	Petroleum refining	56,047,000	1,268,000
5	6	**Ford Motor**	Dearborn, Mich.	Motor vehicles and parts	52,366,400	2,906,800
6	5	**British Petroleum**	London	Petroleum refining	50,662,063	1,474,466
7	8	**Texaco**	Harrison, N.Y.	Petroleum refining	47,334,000	306,000
8	7	**International Business Machines**	Armonk, N.Y.	Office equip., computers	45,937,000	6,582,000
9	9	**E.I. du Pont de Nemours**	Wilmington, Del.	Chemicals	35,915,000	1,431,000
10	•	**American Tel. & Tel.**	New York	Electronics, appliances	33,187,500	1,369,900
11	12	**General Electric**	Fairfield, Conn.	Electronics, appliances	27,947,000	2,280,000
12	10	**Standard Oil (Ind.)**	Chicago	Petroleum refining	26,949,000	2,183,000
13	11	**Chevron**	San Francisco	Petroleum refining	26,798,000	1,534,000
14	15	**ENI**	Rome	Petroleum refining	25,798,221	(50,119)
15	14	**Atlantic Richfield**	Los Angeles	Petroleum refining	24,686,000	567,000
16	17	**Toyota Motor**	Toyota City	Motor vehicles and parts	24,110,656	1,255,936
17	16	**IRI**	Rome	Metal manufacturing	23,353,993	N.A.
18	18	**Unilever**	London/Rotterdam	Food	21,598,790	637,065
19	19	**Shell Oil**	Houston	Petroleum refining	20,701,000	1,772,000
20	22	**Elf-Aquitaine**	Paris	Petroleum refining	20,662,330	742,576
21	24	**Matsushita Electric Industrial**	Osaka	Electronics, appliances	19,993,170	1,009,532
22	44	**Chrysler**	Highland Park, Mich.	Motor vehicles and parts	19,572,700	2,380,000
23	27	**Pemex (Petróleos Mexicanos)**	Mexico City	Petroleum refining	19,404,780	7,283
24	28	**Hitachi**	Tokyo	Electronics, appliances	18,485,905	707,385
25	23	**U.S. Steel**	Pittsburgh	Petroleum refining	18,274,000	493,000
26	21	**Française des Pétroles**	Paris	Petroleum refining	18,158,752	149,476
27	26	**Philips' Gloeilampenfabrieken**	Eindhoven, Netherlands	Electronics, appliances	17,834,690	346,562
28	30	**Nissan Motor**	Yokohama	Motor vehicles and parts	17,513,435	311,168
29	25	**Petrobrás (Petróleo Brasileiro)**	Rio de Janeiro	Petroleum refining	17,087,298	633,164
30	29	**Siemens**	Munich	Electronics, appliances	16,638,012	387,135
31	35	**United Technologies**	Hartford, Conn.	Aerospace	16,331,757	645,015
32	31	**Volkswagenwerk**	Wolfsburg, Germany	Motor vehicles and parts	16,034,741	85,916
33	33	**Phillips Petroleum**	Bartlesville, Okla.	Petroleum refining	15,537,000	810,000
34	20	**Occidental Petroleum**	Los Angeles	Petroleum refining	15,373,000	568,700
35	32	**Daimler-Benz**	Stuttgart	Motor vehicles and parts	15,274,386	402,043
36	36	**Bayer**	Leverkusen, Germany	Chemicals	15,108,180	354,470
37	•	**Kuwait Petroleum**	Kuwait	Petroleum refining	14,996,649	958,377
38	•	**Nippon Oil**	Tokyo	Petroleum refining	14,785,379	61,822
39	40	**Tenneco**	Houston	Petroleum refining	14,779,000	631,000
40	37	**Hoechst**	Frankfurt	Chemicals	14,555,318	376,441
41	34	**Sun**	Radnor, Pa.	Petroleum refining	14,466,000	538,000
42	43	**BASF**	Ludwigshafen-am-Rhein	Chemicals	14,183,965	314,365
43	50	**Mitsubishi Heavy Industries**	Tokyo	Motor vehicles and parts	14,057,316	115,098
44	41	**ITT**	New York	Electronics, appliances	14,000,988	448,046
45	•	**Petróleos de Venezuela**	Caracas	Petroleum refining	13,597,752	2,239,075
46	39	**Fiat**	Turin, Italy	Motor vehicles and parts	13,546,932	356,693
47	48	**BAT Industries**	London	Tobacco	13,461,180	1,132,561
48	46	**Imperial Chemical Industries**	London	Chemicals	13,426,455	781,307
49	42	**Nestlé**	Vevey, Switzerland	Food	13,241,814	632,304
50	47	**Procter & Gamble**	Cincinnati	Soaps, cosmetics	12,946,000	890,000
		TOTALS			**1,296,328,945**	**59,942,260**

☐ **U.S. companies** ☐ **Non-U.S. companies**

• Not on last year's list. N.A. Not available.

THE INTERNATIONAL 500

THE FORTUNE DIRECTORY OF THE LARGEST INDUSTRIAL CORPORATIONS OUTSIDE THE U.S.

In a dramatic rebound, the profits of the International 500 rose 65%. But some things don't change—the high-tech drift in the makeup of the list continued, government-owned companies lost money, and the number of Japanese companies increased.

THE INTERNATIONAL 500 has regained momentum. Sales climbed 7% in 1984, and profits rebounded dramatically—up 65%. Last year saw a 37% rise in profits following three consecutive years of decline.

Japanese companies, including 14 newcomers this year, account for a quarter of the International 500's total sales. From 1983 to 1984 the combined sales of Japanese companies on the list rose 11%. Outsize gains by two companies serve as reminders that Japan's economy is not all cameras, computers, and video recorders. The sales of Yamazaki Baking (No. 344) rose 81%. Japan's biggest breadmaker, Yamazaki is venturing into croissants and pastries. Sanyo-Kokusaku Pulp (No. 293), a manufacturer of paper, pulp, and wood products, reported a 64% gain in sales, a reflection of the recovery in Japanese housing starts.

With companies sorted by country, South Korea and South Africa showed the strongest sales increases, 22% and 18%. In the profit-increase league, the champ was Canada. With the help of a 240% increase by Alcan Aluminium (No. 77), Canadian companies together registered a 200% gain in profits. Brazilian and Swedish companies also reported collective gains exceeding 100%. Sweden achieves a special status in total returns to investors—dividends plus capital gains on stock—included in the International 500 for the first time this year (see page 206). Its companies produced higher returns than those of any other country for the past five years, measured in both dollars and in local currency.

Reflecting changes in the world economy, changes in the composition of the list over a span of years show a drift toward more high tech and less smokestack. When companies are grouped according to the standard industry codes issued by the U.S. government, the category called measuring, scientific, and photographic equipment leads all the rest with a 271% increase in sales since 1975. Office equipment and computers follows with a 235% increase. At the caboose end are industrial and farm equipment, with a 56% gain, and metal products, with 50%.

The high-tech drift is evident among the 34 newcomers to the list this year. Commodore International, the computer manufacturer (No. 380), enjoyed an 86% increase in sales. Doosan of South Korea, a manufacturer of scientific and photo equipment, comes in at No. 413. Merck, a German chemical concern (No. 437), returns after eight years, reporting world sales for the first time. Dow Chemical Europe, headquartered in Switzerland, joins the ranks (No. 127) by breaking out figures separately from its parent company.

The number of money losers dropped from 91 in 1983 to 60 this year. But in a familiar pattern, many government-owned companies continued to fare poorly. Of the top ten money losers, seven are government owned. The list would have been somewhat different if the Italian government's IRI (No. 5) had told all. In the three years since IRI joined the list, making a wide range of products from steel to olive oil, it has consistently failed to supply net income figures in time for publication. If this money loser had come across with the figures, it would undoubtedly have bumped a private-sector loser and made the stats eight out of ten.

—Barbara C. Loos and Dennis J. Moulton

THE INTERNATIONAL 500 RANKED BY SALES

RANK		COMPANY	COUNTRY	SALES	ASSETS	NET INCOME	STOCKHOLDERS' EQUITY	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT				INDUSTRY CODE
									IN LOCAL CURRENCY		IN U.S. DOLLARS		
'84	'83			$000	$000	$000	$000		5/31/84-5/31/85	5-YEAR AVERAGE	5/31/84-5/31/85	5-YEAR AVERAGE	
1	1	**Royal Dutch/Shell Group**	Neth./Britain	84,864,598	69,071,226	4,872,148	29,509,314	149,000	37.08	237.27	22.54	91.35	29
2	2	**British Petroleum**	Britain	50,662,063	39,619,812	1,474,466	13,366,794	130,970	15.59	105.47	7.34	[illegible]3.00	29
3	3	**ENI**[1]	Italy	25,798,221	23,988,740	(50,119)	3,415,599	130,897	–	–	–	–	29
4	5	**Toyota Motor**[2]	Japan	24,110,656	15,534,214	1,255,936	9,450,367	59,500	1.61	103.27	(6.34)	80.63	40
5	4	**IRI**[1]	Italy	23,353,993	N.A.	N.A.	N.A.	504,915	–	–	–	–	33
6	6	**Unilever**	Britain	21,598,790	11,217,546	637,065	3,956,886	319,000	38.78	224.37	28.87	78.39	20
7	8	**Elf-Aquitaine**[1]	France	20,662,330[3]	16,894,587[3]	742,576[3]	4,496,762[3]	76,219[3]	–	–	–	–	29
8	9	**Matsushita Electric Industrial**[4]	Japan	19,993,170	16,916,957	1,009,532	7,478,284	132,814	(6.19)	195.09	(13.54)	162.23	36
9	12	**Pemex (Petróleos Mexicanos)**[1]	Mexico	19,404,780[5]	37,432,599[5]	7,283[5]	21,418,101[5]	175,420[5]	–	–	–	–	29
10	13	**Hitachi**[6]	Japan	18,485,905	20,516,276	707,385	6,416,285	161,533	(9.93)	205.17	(16.99)	171.19	36
11	7	**Française des Pétroles**[1]	France	18,158,752[3]	11,011,137[3]	149,476[3]	5,398,291[3]	44,981[3]	–	–	–	–	29
12	11	**Philips' Gloeilampenfabrieken**	Netherlands	17,834,690	15,297,335	346,562	4,758,485	344,000	35.56	358.33	21.18	160.03	36
13	15	**Nissan Motor**[6]	Japan	17,513,435	14,859,640	311,168	5,459,079	109,873	1.64	21.48	(6.31)	7.96	40
14	10	**Petrobrás (Petróleo Brasileiro)**[1]	Brazil	17,087,298	13,797,477	633,164	4,830,180	58,507	–	–	–	–	29
15	14	**Siemens**[7]	Germany	16,638,012	15,366,826	387,185	3,791,842	319,000	58.23	164.24	41.47	53.90	36
16	16	**Volkswagenwerk**	Germany	16,034,741	10,438,378	85,916	1,970,637	238,353	34.77	52.81	20.49	(10.99)	40
17	17	**Daimler-Benz**	Germany	15,274,386	9,073,064	402,043	2,606,767	199,872	50.72	329.68	34.76	150.24	40
18	18	**Bayer**	Germany	15,108,180[3]	10,017,021[3]	354,470[3]	2,185,204[3]	174,755[3]	44.93	131.87	29.58	35.04	28
19	33	**Kuwait Petroleum**[1,2]	Kuwait	14,996,649	16,691,927	958,377	11,348,180	14,640	–	–	–	–	29
20	●	**Nippon Oil**[6]	Japan	14,785,379	7,331,956	61,822	1,356,516	11,000	–	–	–	–	29
21	19	**Hoechst**	Germany	14,555,318	8,933,090	376,441	2,378,288	177,940	44.51	141.45	29.20	40.62	28
22	23	**BASF**	Germany	14,183,965[3]	7,680,264[3]	314,365[3]	2,729,428[3]	115,816[3]	43.06	91.87	27.91	11.74	28
23	27	**Mitsubishi Heavy Industries**[6]	Japan	14,057,316	17,780,543	115,098	1,572,819	93,800	29.33	79.21	19.20	59.25	40
24	68	**Petróleos de Venezuela**[1]	Venezuela	13,597,752	17,109,129	2,239,075	13,923,855	43,553	–	–	–	–	29
25	21	**Fiat**	Italy	13,546,932	15,129,649	356,693	3,263,946	230,805	119.18	940.69	89.65	347.89	40
26	26	**BAT Industries**	Britain	13,461,180	11,654,112	1,132,561	4,951,608	212,822	57.51	588.52	46.26	278.67	21
27	25	**Imperial Chemical Industries**	Britain	13,426,455	10,333,992	781,307	4,433,982	115,600	49.34	176.62	38.68	52.14	28
28	22	**Nestlé**	Switzerland	13,241,814[3]	9,409,458[3]	632,304[3]	4,831,219[3]	137,950[3]	16.82	78.93	2.57	15.66	20
29	31	**General Motors of Canada**	Canada	12,583,753[8]	2,922,623	680,052	1,331,689	45,391	29.07	131.98	21.61	95.92	40
30	20	**Renault**[1]	France	12,226,948[3]	10,726,962[3]	(1,435,861)[3]	191,764[3]	213,725[3]	–	–	–	–	40
31	28	**Nippon Steel**[6]	Japan	11,994,569	17,059,506	3,619	2,915,528	72,820	(0.99)	25.41	(8.75)	11.44	33
32	29	**Thyssen**[7]	Germany	11,776,215	6,264,424	59,216	804,216	131,030	30.72	78.15	16.88	3.75	33
33	36	**Esso UK**	Britain	11,460,019[8]	5,270,652	946,227	1,310,393	6,097	–	–	–	–	29
34	34	**Canadian Pacific**	Canada	11,299,993	14,221,171	291,013	3,422,065	120,000	57.54	55.59	48.44	31.40	33
35	35	**Toshiba**[6]	Japan	11,288,280	11,807,947	249,761	2,068,151	105,000	(3.38)	120.00	(10.75)	95.50	36
36	24	**Volvo**	Sweden	10,517,740	6,413,912	189,085	818,698	68,586	(2.80)	895.78	(11.11)	375.46	40
37	30	**Peugeot**	France	10,476,009	7,018,285	(38,999)	548,355	187,500	60.43	89.67	44.19	(15.81)	40
38	49	**Samsung Group**	South Korea	10,318,075	7,326,826	112,169	946,067	122,261	–	–	–	–	36
39	37	**Hyundai Group**	South Korea	10,276,878	8,259,632	106,670	1,173,004	155,000	–	–	–	–	37
40	32	**Idemitsu Kosan**[6]	Japan	9,993,424[5]	7,070,976[5]	12,337[5]	154,042[5]	6,573[5]	–	–	–	–	29
41	39	**Honda Motor**[9]	Japan	9,777,779	6,116,073	402,741	2,452,457	51,355	23.30	192.64	13.64	160.05	40
42	53	**Ford Motor of Canada**	Canada	9,359,591[8]	2,090,111	334,712	782,326	35,600	62.24	270.28	52.86	212.73	40
43	50	**Lucky Group**	South Korea	8,942,894	5,304,089	28,278	950,100	61,600	–	–	–	–	29
44	38	**Indian Oil**[1,6]	India	8,855,981	2,594,365	80,198	708,637	29,757	–	–	–	–	29
45	40	**Petrofina**	Belgium	8,653,072	5,640,666	268,240	1,191,698	22,500	1.90	82.02	(6.52)	(15.46)	29
46	42	**CGE (Cie. Générale d'Électricité)**[1]	France	8,479,757[3]	9,371,562[3]	67,533[3]	723,667[3]	161,900[3]	–	–	–	–	36
47	46	**Rio Tinto-Zinc**	Britain	7,944,754	10,075,874	219,300	2,726,395	74,004	3.70	96.07	(3.69)	7.83	10
48	62	**Daewoo Industrial**	South Korea	7,918,039	7,923,433	59,559	803,542	89,000	–	–	–	–	45
49	48	**Ruhrkohle**	Germany	7,869,627	5,234,873	41,042	292,751	135,857	–	–	–	–	10
50	70	**NEC**[6]	Japan	7,457,866	9,253,553	188,663	1,820,062	78,389	(1.80)	217.99	(9.49)	182.58	36

● Not on last year's list.

N.A. Not available.

[1] Government-owned.

[2] Figures are for fiscal year ended June 30, 1984.

[3] Also includes certain subsidiaries owned 50% or less, either fully or on a prorated basis.

[4] Figures are for fiscal year ended November 20, 1984.

[5] Parent only.

[6] Figures are for fiscal year ended March 31, 1984.

[7] Figures are for fiscal year ended September 30, 1984.

[8] Revenues include certain sales to foreign affiliates of the U.S. parent company.

[9] Figures are for fiscal year ended February 29, 1984.

RANK		COMPANY	COUNTRY	SALES	ASSETS	NET INCOME	STOCKHOLDERS' EQUITY	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT				INDUSTRY CODE
									IN LOCAL CURRENCY		IN U.S. DOLLARS		
'84	'83			$000	$000	$000	$000		5/31/84-5/31/85	5-YEAR AVERAGE	5/31/84-5/31/85	5-YEAR AVERAGE	
51	51	**Ciba-Geigy**	Switzerland	7,430,316	8,640,907	504,738	5,352,172	81,423	40.29	159.44	23.18	67.70	28
52	57	**Barlow Rand**[7]	South Africa	7,379,166	4,301,918	212,494	1,077,253	153,315	(8.19)	58.29	(40.63)	45.01	20
53	65	**Mitsubishi Electric**[6]	Japan	7,237,880	7,055,168	157,567	1,527,533	65,704	0.31	116.02	(7.54)	91.96	36
54	43	**General Electric Co.**[6]	Britain	7,158,826	7,041,306	580,909	3,462,938	170,865	14.31	200.87	6.15	65.47	36
55	45	**Veba Oel**	Germany	7,055,556[3]	2,373,012[3]	(21,011)[3]	448,308[3]	23,731[3]	22.70	75.74	9.70	2.35	29
56	52	**Montedison**	Italy	7,043,972	6,098,140	(47,218)	699,380	71,215	–	–	–	–	28
57	54	**DSM**[1]	Netherlands	7,015,391[3]	3,449,385[3]	144,289[3]	736,356[3]	27,190[3]	–	–	–	–	10
58	44	**Saint-Gobain**[1]	France	7,015,304[3]	5,902,823[3]	58,761[3]	1,115,152[3]	1,252,280[3]	–	–	–	–	32
59	41	**National Coal Board**[1,6]	Britain	6,950,027	8,683,938	0	(44,563)	243,300	–	–	–	–	10
60	55	**YPF (Yacimientos Petróliferos)**[1]	Argentina	6,880,152	9,109,714	(3,592,682)	N.A.	33,728	–	–	–	–	29
61	60	**Thomson**[1]	France	6,620,057[3]	7,284,538[3]	(2,402)[3]	291,634[3]	111,900[3]	–	–	–	–	36
62	64	**Sunkyong**	South Korea	6,526,100	2,441,635	49,566	412,276	19,048	–	–	–	–	29
63	47	**Imperial Oil**	Canada	6,522,837[8]	6,643,716	411,538	3,484,149	14,331	38.25	49.53	30.26	26.29	29
64	73	**Robert Bosch**	Germany	6,450,494	4,460,450	143,787	1,219,147	134,571	–	–	–	–	40
65	58	**Maruzen Oil**[6]	Japan	6,419,312	3,723,275	125,829	(235,813)	2,231	(11.65)	(32.23)	(18.57)	(39.78)	29
66	56	**Fried. Krupp**	Germany	6,403,501	3,295,015	25,901	522,429	66,320	–	–	–	–	33
67	66	**Mazda Motor**[10,11]	Japan	6,369,465	3,401,368	146,777	1,020,297	28,937	–	–	–	–	40
68	61	**Esso (Germany)**	Germany	6,215,695[8]	1,651,588	122,870	413,154	3,977	–	–	–	–	29
69	67	**Grand Metropolitan**[7]	Britain	6,198,035	4,830,246	295,911	2,152,219	125,100	(0.06)	237.81	(7.20)	85.79	49
70	92	**Sanyo Electric**[12]	Japan	6,051,175	4,974,061	185,687	1,589,390	24,797	1.25	41.90	(6.68)	26.10	36
71	75	**Schlumberger**	Neth. Antilles	5,978,552	10,913,194	1,182,073	6,992,202	79,800	(19.30)	88.35	(27.47)	(16.39)	38
72	63	**Nippon Kokan**[6]	Japan	5,962,725	11,624,142	(44,505)	1,210,394	37,621	0.60	19.51	(7.27)	6.20	33
73	81	**Chinese Petroleum**[1]	Taiwan	5,943,493[5]	4,322,923[5]	531,021[5]	2,466,075[5]	21,702[5]	–	–	–	–	29
74	71	**Rhône-Poulenc**[1]	France	5,856,323[3]	4,487,128[3]	227,473[3]	1,043,253[3]	79,230[3]	–	–	–	–	28
75	76	**Mannesmann**	Germany	5,535,432	3,459,351	57,102	981,909	103,681	26.63	85.69	13.22	8.14	34
76	91	**Kobe Steel**[6]	Japan	5,472,832	8,000,828	(37,170)	676,[illegible]	33,722	5.39	9.31	(2.86)	(2.85)	33
77	85	**Alcan Aluminium**	Canada	5,467,000	6,690,000	253,000	2,916,000	70,000	(7.20)	28.02	(12.57)	8.12	33
78	74	**Nippon Mining**[6]	Japan	5,400,589	4,026,452	25,940	356,570	8,093	4.92	76.39	(3.29)	56.75	29
79	95	**Dalgety**[2]	Britain	5,375,155	1,289,082	32,387	436,708	20,860	17.25	134.74	8.88	29.10	20
80	106	**Neste**[1]	Finland	5,363,922	2,434,126	11,763	154,995	8,422	–	–	–	–	29
81	97	**Sony**[11,13]	Japan	5,325,219	5,330,317	303,000	2,206,675	43,973	29.62	119.70	19.46	95.23	36
82	83	**Toa Nenryo Kogyo**	Japan	5,311,525	2,881,753	179,786	989,209	3,890	22.35	42.68	12.76	26.79	29
83	82	**Akzo Group**	Netherlands	5,143,965	3,206,508	234,030	1,126,087	66,100	30.99	469.31	17.09	223.00	28
84	119	**Fujitsu**[6]	Japan	5,121,324	5,680,267	282,207	1,928,307	62,071	6.27	244.37	(2.05)	206.02	44
85	88	**Daikyo Oil**[6]	Japan	5,102,445	2,064,503	28,509	45,895	2,049	(5.61)	(23.26)	(13.00)	(31.81)	29
86	80	**Michelin**	France	5,075,763	6,110,828	(256,455)	800,540	120,000	(10.50)	4.53	(19.56)	(53.60)	30
87	78	**Ford Motor**	Britain	5,011,047[8]	3,747,288	49,416	1,445,184	58,700	–	–	–	–	40
88	79	**British Steel**[1,6]	Britain	5,008,195	5,221,000	(381,804)	3,204,188	78,750	–	–	–	–	33
89	87	**Brown Boveri**	Switzerland	4,927,464	8,111,496	28,490	1,643,983	98,400	6.90	(10.75)	(4.41)	(48.02)	36
90	77	**Sumitomo Metal Industries**[6]	Japan	4,921,381	9,893,517	(41,783)	1,354,438	34,865	(7.12)	10.91	(14.39)	(1.43)	33
91	103	**Broken Hill Proprietary**[14]	Australia	4,884,874	9,176,037	558,053	4,675,627	58,000	53.48	53.66	14.16	(10.47)	33
92	133	**Chrysler Canada**	Canada	4,844,256	847,102	216,688	274,725	12,448	75.10	594.65	64.98	486.67	40
93	105	**Mitsubishi Chemical Industries**[15]	Japan	4,825,690	4,894,823	(14,747)	403,601	15,004	92.65	163.83	77.56	134.45	28
94	282	**Preussag**	Germany	4,822,107[3]	1,460,977[3]	47,575[3]	291,797[3]	20,181[3]	8.59	242.04	(2.90)	99.20	33
95	94	**Texaco Canada**	Canada	4,753,147	2,579,254	326,605	1,580,540	3,635	(4.19)	114.97	(9.72)	81.56	29
96	90	**Mitsubishi Oil**[6]	Japan	4,738,107	3,412,343	(19,362)	41,566	3,255	(13.19)	(4.49)	(19.99)	(15.12)	29
97	93	**BMW (Bayerische Motoren Werke)**	Germany	4,714,309	2,068,134	113,730	564,489	44,692	4.77	209.30	(6.32)	80.13	40
98	158	**BTR**	Britain	4,656,721	2,612,564	224,108	980,942	60,300	70.37	571.24	58.21	269.17	45
99	96	**Kawasaki Steel**[6]	Japan	4,623,461[5]	8,164,552[5]	3,086[5]	1,367,742[5]	28,163[5]	(8.86)	22.11	(16.00)	8.51	33
100	86	**BL**[1]	Britain	4,543,114	2,580,873	107,516	868,736	80,478	(37.50)	94.44	(41.96)	6.94	40

N.A. Not available.

[10] Name changed from Toyo Kogyo on May 1, 1984.

[11] Figures are for fiscal year ended October 31, 1984.

[12] Figures are for fiscal year ended November 30, 1984.

[13] Includes only wholly owned subsidiaries.

[14] Figures are for fiscal year ended May 31, 1984.

[15] Figures are for fiscal year ended January 31, 1984.

RANK '84	RANK '83	COMPANY	COUNTRY	SALES $000	ASSETS $000	NET INCOME $000	STOCKHOLDERS' EQUITY $000	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY 5/31/84-5/31/85	IN LOCAL CURRENCY 5-YEAR AVERAGE	IN U.S. DOLLARS 5/31/84-5/31/85	IN U.S. DOLLARS 5-YEAR AVERAGE	INDUSTRY CODE
101	69	**Adam Opel**	Germany	4,521,889[8]	2,028,232	(244,034)	516,213	59,679	—	—	—	—	40
102	84	**Ford-Werke**	Germany	4,488,850[8]	1,875,928	(104,647)	340,032	46,533	(16.76)	(7.91)	(25.57)	(46.36)	40
103	122	**Ishikawajima-Harima Heavy Ind.**[6]	Japan	4,451,908	7,095,595	48,632	620,098	41,000	4.59	16.60	(3.59)	3.61	45
104	89	**Gutehoffnungshütte**[7]	Germany	4,433,716[5]	4,288,114[5]	(20,915)[5]	514,566[5]	53,204[5]	12.42	(3.26)	0.51	(43.65)	45
105	107	**Usinor**	France	4,421,588	4,540,028	(845,921)	1,358,786	55,920	103.12	(49.02)	82.56	(77.37)	33
106	127	**Statoil**[1]	Norway	4,364,255	5,056,656	143,745	466,227	4,855	—	—	—	—	29
107	112	**ASEA**	Sweden	4,361,651	4,127,657	44,704	472,343	58,434	5.43	771.12	(3.58)	315.93	36
108	146	**Ultramar**	Britain	4,354,483	2,714,699	170,418	1,020,661	4,016	85.12	245.98	71.90	90.28	29
109	111	**Norsk Hydro**[1]	Norway	4,353,603	3,918,262	130,399	548,295	19,825	(12.47)	26.19	(22.71)	(30.07)	28
110	104	**Sacilor**[1]	France	4,334,440[3]	4,433,406[3]	(920,006)[3]	(1,665,187)[3]	63,583[3]	312.00	(12.34)	270.29	(61.09)	33
111	101	**ENPETROL**[1]	Spain	4,305,366	1,648,525	19,526	417,904	5,422	—	—	—	—	29
112	102	**Taiyo Fishery**[15]	Japan	4,253,553	1,896,442	977	68,709	9,446	48.94	105.16	37.27	82.32	20
113	98	**Thorn EMI**[6]	Britain	4,231,462	2,769,631	137,211	917,988	89,051	(5.15)	115.51	(11.92)	18.53	36
114	108	**Electrolux**	Sweden	4,226,452	2,924,986	146,798	576,516	89,541	39.12	315.66	27.22	98.47	36
115	130	**Sharp**[6]	Japan	4,208,281	4,149,072	160,458	1,335,439	26,627	(9.73)	80.14	(16.80)	60.08	36
116	118	**Türkiye Petrolleri**[1]	Turkey	4,179,851	3,181,566	354,214	1,004,171	16,504	—	—	—	—	29
117	72	**George Weston Holdings**[6]	Britain	4,140,337	1,890,169	182,252	868,106	81,820	—	—	—	—	20
118	109	**Gulf Canada**	Canada	4,104,569[8]	4,263,449	237,812	1,920,254	8,982	11.11	(32.66)	4.68	(43.12)	29
119	132	**Esso (France)**	France	4,079,766[8]	1,223,921	53,134	630,759	3,910[5]	(17.51)	187.94	(25.86)	27.80	29
120	120	**Pechiney**[1]	France	4,063,595[3]	3,883,595[3]	62,398[3]	870,013[3]	48,230[3]	—	—	—	—	33
121	116	**Showa Oil**	Japan	4,055,403[5]	2,255,461[5]	12,320[5]	77,675[5]	1,806[5]	—	—	—	—	29
122	100	**Degussa**[7]	Germany	4,049,885	1,344,820	39,965	271,280	22,531	(4.59)	95.84	(14.70)	14.06	33
123	110	**IBM Deutschland**	Germany	3,959,314[8]	2,447,254	255,032	633,914	27,507	—	—	—	—	44
124	131	**Asahi Chemical Industry**[6]	Japan	3,953,483	3,776,779	56,099	832,667	21,531	112.79	577.17	96.12	501.76	28
125	115	**Solvay**	Belgium	3,946,457[3]	2,934,335[3]	115,529[3]	931,330[3]	43,527[3]	14.77	135.41	5.27	9.33	28
126	99	**AEG-Telefunken**	Germany	3,867,122[3]	2,472,649[3]	154,704[3]	315,224[3]	73.190[3]	32.87	83.38	18.80	6.80	36
127	●	**Dow Chemical Europe**	Switzerland	3,845,000[8]	2,588,000	N.A.	N.A.	12,200	—	—	—	—	28
128	113	**Metallgesellschaft**[7]	Germany	3,809,533	1,620,677	7,829	218,660	21,985	8.55	2.57	(2.94)	(40.26)	33
129	126	**IBM France**	France	3,801,057[5]	2,040,818[5]	286,486[5]	875,317[5]	21,799[5]	—	—	—	—	44
130	59	**VÖEST-Alpine**	Austria	3,780,385	5,329,255	27,117	220,090	69,988	—	—	—	—	33
131	114	**Flick Group**	Germany	3,692,241	2,460,868	72,372	666,202	43,205	—	—	—	—	26
132	117	**Imperial Group**[11]	Britain	3,689,048	2,644,511	176,678	1,265,169	92,599	40.74	243.84	30.69	89.10	21
133	156	**Texaco**	Britain	3,679,218[*,8]	730,614[*]	(366,835)[*]	157,946[*]	4,156[*]	—	—	—	—	29
134	152	**Isuzu Motors**[11]	Japan	3,664,130	3,207,057	(72,251)	256,903	21,373	24.91	81.65	15.13	61.42	40
135	141	**Petro-Canada**[1]	Canada	3,626,463	6,851,239	194,212	3,462,646	6,697	4.34	—	(1.68)	—	29
136	136	**L.M. Ericsson Telephone**	Sweden	3,588,382[3]	4,188,280[3]	53,681[3]	730,061[3]	75,116[3]	5.34	495.23	(3.66)	184.21	36
137	154	**CEPSA (Española de Petróleos)**	Spain	3,548,948	1,215,451	35,830	253,028	4,149[5]	—	—	—	—	29
138	135	**ALUSUISSE (Swiss Aluminium)**	Switzerland	3,548,216	3,478,854	71,735	1,013,764	35,329	12.94	(27.10)	(0.82)	(52.87)	33
139	139	**Ssangyong Cement Industrial**	South Korea	3,544,845	2,962,054	27,296	539,859	15,231	—	—	—	—	29
140	128	**Roche/Sapac**	Switzerland	3,515,304	4,789,658	161,669	2,921,761	46,199	—	—	—	—	42
141	124	**Allied-Lyons**[6]	Britain	3,505,678	3,362,836	182,704	1,816,782	71,204	31.93	239.39	22.51	86.66	49
142	123	**Pirelli**	Switzerland	3,497,646	3,639,172	72,216	N.A.	62,000	70.57	242.01	47.59	47.19	30
143	171	**Canon**	Japan	3,495,083	3,643,287	147,436	1,209,499	30,302	19.01	164.45	9.68	135.00	38
144	153	**Sumitomo Chemical**	Japan	3,491,051	3,319,340	52,890	462,039	10,954	32.74	110.57	22.34	87.12	28
145	140	**Kawasaki Heavy Industries**[6]	Japan	3,472,658	4,569,673	(15,319)	363,760	27,331	12.05	(11.43)	3.27	(21.29)	45
146	121	**Salzgitter**[1,7]	Germany	3,423,253	2,615,065	(153,279)	237,800	45,920	—	—	—	—	33
147	159	**Nippondenso**	Japan	3,422,992	2,778,748	162,656	1,531,836	37,044	(3.72)	162.78	(11.27)	133.51	40
148	190	**Rothmans International**[6]	Britain	3,420,400	2,299,902	110,039	607,102	25,000	—	—	—	—	21
149	173	**Northern Telecom**	Canada	3,380,792	3,071,631	257,775	1,378,558	46,993	28.93	317.45	21.48	252.56	36
150	142	**Bridgestone**[16]	Japan	3,374,584	2,848,454	65,147	1,029,952	32,577	(1.02)	36.35	(8.77)	21.17	30

● Not on last year's list.
N.A. Not available.
[*] FORTUNE estimate.
[16] Name changed from Bridgestone Tire on April 1, 1984.

RANK		COMPANY	COUNTRY	SALES	ASSETS	NET INCOME	STOCKHOLDERS' EQUITY	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT				INDUSTRY CODE
									IN LOCAL CURRENCY		IN U.S. DOLLARS		
'84	'83			$000	$000	$000	$000		5/31/84-5/31/85	5-YEAR AVERAGE	5/31/84-5/31/85	5-YEAR AVERAGE	
151	125	**Mobil Oil (Germany)**	Germany	3,369,441[5,8]	1,145,605[5]	42,372[5]	357,395[5]	2,378[5]	—	—	—	—	29
152	191	**Oil & Natural Gas Commission**[1,6]	India	3,367,169	5,931,320	781,153	2,195,093	37,016	—	—	—	—	29
153	205	**Hanson Trust**[7]	Britain	3,333,088	2,646,683	170,971	506,310	67,000	76.15	1,079.39	63.57	548.64	20
154	150	**Snow Brand Milk Products**[6]	Japan	3,328,068	1,402,105	12,216	209,273	16,049	61.83	187.69	49.15	155.65	20
155	129	**Esso Italiana**	Italy	3,320,922[5,8]	737,613[5]	2,105[5]	46,488[5]	2,591[5]	—	—	—	—	29
156	134	**British Aerospace**	Britain	3,296,015	2,836,806	144,235	1,063,691	75,753	23.91	—	15.06	—	41
157	273	**Henkel**	Germany	3,280,208	1,776,984	44,636	613,869	31,612	—	—	—	—	28
158	179	**IBM Japan**	Japan	3,235,692[5,8]	1,807,170[5]	229,755[5]	979,229[5]	15,110[5]	—	—	—	—	44
159	148	**Canada Development Corp.**	Canada	3,228,140	5,787,168	63,159	900,431	18,000	93.75	(7.92)	82.55	(22.23)	30
160	164	**Toray Industries**[6]	Japan	3,194,980	3,366,772	60,370	853,935	30,265	—	—	—	—	25
161	147	**Sandoz**	Switzerland	3,161,095	2,918,108	174,766	1,607,843	38,036	25.28	99.97	10.00	29.26	42
162	318	**TBG**[12,17]	Neth. Antilles	3,150,000	2,309,889	71,056	718,500	15,700	—	—	—	—	34
163	181	**IBM United Kingdom Holdings**	Britain	3,137,247[8]	1,315,488	267,113	697,116	17,506	—	—	—	—	44
164	172	**Saab-Scania**	Sweden	3,136,007	2,597,451	82,411	434,624	43,485	(17.56)	520.71	(24.61)	196.37	40
165	138	**BSN**	France	3,121,382[3]	2,138,928[3]	86,346[3]	697,332[3]	37,340[3]	3.25	242.38	(7.19)	51.96	20
166	160	**Deutsche Texaco**	Germany	3,088,248[8]	915,453	17,126	219,217	4,286	(19.31)	14.47	(27.86)	(33.32)	29
167	155	**Reed International**[6]	Britain	3,046,975	1,833,963	102,013	929,344	55,000	60.60	349.99	49.13	147.48	27
168	203	**Haci Omer Sabanci Holding**	Turkey	3,044,154[3]	2,194,878[3]	87,117[3]	157,053[3]	27,721[3]	—	—	—	—	22
169	168	**Asahi Glass**	Japan	3,040,084	2,900,541	122,359	1,143,243	16,602	27.66	178.43	17.66	147.42	32
170	143	**Courtaulds**[6]	Britain	3,039,667	1,797,738	86,353	669,875	70,000	22.83	157.09	14.06	41.39	22
171	162	**Steel Authority of India**[1,6]	India	3,013,661	6,891,711	(208,004)	3,196,617	205,236	—	—	—	—	33
172	144	**Komatsu**	Japan	3,002,986	3,751,216	95,300	1,412,464	23,399	(2.39)	24.23	(10.04)	10.40	45
173	151	**Cockerill Sambre**[1]	Belgium	2,991,267	2,392,399	73,107	182,718	19,159	(23.37)	(8.52)	(29.71)	(57.51)	33
174	174	**BOC Group**[7]	Britain	2,980,094	3,405,840	128,438	1,480,553	38,670	182.61	1,187.37	162.43	608.02	28
175	161	**Koc Holding**	Turkey	2,953,156	887,613	57,110	135,443	29,643	—	—	—	—	40
176	149	**NOVA**	Canada	2,929,048	4,863,349	157,010	1,152,695	7,800	(9.62)	(25.44)	(14.85)	(37.03)	29
177	166	**Beecham Group**[6]	Britain	2,899,324	2,539,488	241,312	1,402,713	36,000	30.30	288.88	21.00	113.88	42
178	157	**Guest Keen & Nettlefolds**	Britain	2,885,626	2,071,662	39,399	851,941	54,903†	39.42	24.51	29.46	(31.51)	40
179	184	**Dai Nippon Printing**[14]	Japan	2,884,171	2,179,493	100,473	1,224,769	13,146	19.84	173.61	10.45	143.14	27
180	145	**Aérospatiale**[1]	France	2,875,038[5]	4,626,884[5]	37,969[5]	221,290[5]	35,000[5]	—	—	—	—	41
181	175	**ÖMV**[1]	Austria	2,833,835	1,463,422	12,002	542,262	7,297	—	—	—	—	29
182	●	**General Sekiyu**[6]	Japan	2,806,010	1,766,131	30,101	304,467	1,937	—	—	—	—	29
183	165	**BICC**	Britain	2,789,999	1,343,280	33,389	379,824	48,500	12.13	173.32	4.13	50.32	45
184	180	**Fuji Photo Film**[18]	Japan	2,759,794	3,150,051	239,308	1,770,330	16,689	17.47	249.25	8.26	210.36	28
185	195	**Korea Explosives Group**	South Korea	2,752,220	1,976,263	8,291	466,389	16,032	—	—	—	—	28
186	178	**Cadbury Schweppes**	Britain	2,692,770	1,549,636	86,945	600,655	35,455	36.96	257.86	27.18	96.81	20
187	206	**Toppan Printing**[14]	Japan	2,648,032	1,749,525	76,133	793,687	12,171	20.90	134.86	11.43	108.71	27
188	170	**Unigate**[6]	Britain	2,639,966	1,124,844	28,486	419,894	35,200	45.98	88.36	35.56	3.59	20
189	201	**Suzuki Motor**[6]	Japan	2,627,147	1,638,189	24,602	400,338	17,297	28.18	97.42	18.13	75.43	40
190	325	**Standard Telephones & Cables**[19]	Britain	2,626,660	1,503,895	84,007	462,853	51,914	(43.70)	102.33	(47.72)	11.27	36
191	196	**Kubota**[20]	Japan	2,620,124	2,828,794	60,026	1,164,677	18,000	9.82	4.39	1.22	(7.23)	45
192	189	**Conoco**	Britain	2,615,574[8]	976,773	138,098	512,183	1,723	—	—	—	—	29
193	185	**Hiram Walker Resources**[7]	Canada	2,615,436	4,043,844	192,138	1,512,554	10,300	47.27	37.89	38.76	16.46	49
194	183	**Noranda**[21]	Canada	2,614,862	4,771,379	(3,437)	1,969,874	26,000	(22.75)	(28.13)	(27.21)	(39.30)	33
195	188	**Olivetti**	Italy	2,604,353	3,504,326	202,534	1,011,501	47,613	34.49	366.62	16.37	100.82	44
196	163	**Koor Industries**	Israel	2,577,938	2,543,893	39,650	614,481	34,000	—	—	—	—	36
197	194	**Canada Packers**[6]	Canada	2,562,248	467,109	20,391	232,992	13,600	13.66	140.50	7.09	103.12	20
198	169	**EFIM**[1]	Italy	2,547,120[5]	1,941,116[5]	(323,694)[5]	159,023[5]	40,400[5]	—	—	—	—	33
199	●	**Hoesch**[22]	Germany	2,545,913	1,943,848	33,127	320,782	33,500	—	—	—	—	33
200	217	**Sumitomo Electric Industries**[6]	Japan	2,523,622	2,446,874	48,455	716,400	21,047	2.40	339.06	(5.61)	290.17	34

● Not on last year's list.

[17] Name changed from Thyssen-Bornemisza on November 30, 1984.

[18] Figures are for fiscal year ended October 20, 1984.

[19] Acquired ICL (1983 rank: 345) on September 10, 1984.

[20] Figures are for fiscal year ended April 15, 1984.

[21] Name changed from Noranda Mines on May 4, 1984.

[22] Name changed from Hoesch Werke on July 13, 1984.

RANK		COMPANY	COUNTRY	SALES	ASSETS	NET INCOME	STOCKHOLDERS' EQUITY	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY		IN U.S. DOLLARS		INDUSTRY CODE
'84	'83			$000	$000	$000	$000		5/31/84-5/31/85	5-YEAR AVERAGE	5/31/84-5/31/85	5-YEAR AVERAGE	
201	222	**Ube Industries**[6]	Japan	2,506,250	3,503,951	(32,187)	129,273	15,094	32.77	8.96	22.36	(3.17)	28
202	182	**Bertelsmann**[2]	Germany	2,501,856	1,301,571	62,902	224,672	31,639	—	—	—	—	27
203	211	**Fuji Heavy Industries**[6]	Japan	2,491,010[5]	1,731,358[5]	63,764[5]	517,659[5]	13,928[5]	36.38	102.11	25.69	79.60	40
204	137	**Esso Belgium**[23]	Belgium	2,465,546[5]	420,563[5]	(23,682)[5]	112,356[5]	1,220[5]	—	—	—	—	29
205	237	**Teijin**[6]	Japan	2,464,737	2,452,756	60,256	490,963	11,020	28.13	288.70	18.09	245.42	28
206	177	**Saarbergwerke**[1]	Germany	2,454,730[3]	1,559,683[3]	(28,777)[3]	191,218[3]	31,030[3]	—	—	—	—	29
207	224	**Furukawa Electric**[6]	Japan	2,447,026	2,842,598	6,443	348,352	14,269	(7.38)	125.60	(14.63)	100.47	33
208	187	**CSR**[6]	Australia	2,430,877	2,771,045	82,722	1,317,828	14,327	6.79	(33.29)	(20.56)	(61.13)	20
209	212	**Pohang Iron & Steel**	South Korea	2,428,832[5]	3,492,085[5]	74,488[5]	1,752,748[5]	15,081[5]	—	—	—	—	33
210	200	**Rank Xerox**[11]	Britain	2,428,635	2,134,081	113,933	1,075,326	30,986	—	—	—	—	44
211	213	**Matsushita Electric Works**[12]	Japan	2,421,858	1,546,137	61,765	746,481	15,646	24.98	84.30	15.18	63.78	36
212	209	**Bass**[7]	Britain	2,345,040	2,407,411	186,501	1,536,577	69,192	57.80	215.19	46.53	73.35	49
213	167	**Deutsche Babcock**[7]	Germany	2,342,342	1,251,810	9,983	157,793	22,515	11.14	(18.33)	(0.62)	(52.43)	34
214	221	**United Biscuits (Holdings)**	Britain	2,328,027	1,022,398	79,867	348,790	41,131	36.71	245.47	26.95	90.00	20
215	210	**International Thomson Org.**	Canada	2,317,075	1,514,432	131,553	571,126	22,000	28.31	217.85	19.14	74.81	29
216	228	**Hyosung Group**	South Korea	2,306,225	2,000,205	9,999	338,251	23,000	—	—	—	—	28
217	198	**Burmah Oil**[1]	Britain	2,297,843[3]	1,181,739[3]	55,827[3]	473,969[3]	21,474[3]	82.51	81.14	69.48	(0.37)	29
218	235	**Zambia Industrial & Mining**[1,6]	Zambia	2,272,056	3,592,840	(12,103)	752,176	131,390	—	—	—	—	10
219	214	**L'Air Liquide**	France	2,267,779[3]	2,019,729[3]	114,790[3]	679,081[3]	5,794[3]	50.20	125.72	35.00	0.18	28
220	232	**Iscor**[1,2]	South Africa	2,262,091[5]	3,136,845[5]	58,583[5]	1,818,406[5]	62,600[5]	—	—	—	—	33
221	226	**Hoogovens Groep**	Netherlands	2,260,310	1,912,342	64,299	329,201	28,039	—	—	—	—	33
222	231	**Takeda Chemical**[6]	Japan	2,247,269	2,783,382	103,060	1,391,951	13,344	28.57	156.68	18.49	128.10	42
223	239	**Kirin Brewery**[15]	Japan	2,233,083	2,461,158	84,064	918,085	10,572	37.21	140.85	26.46	114.03	49
224	242	**Kanebo**[24]	Japan	2,209,758	2,265,075	9,588	31,370	23,388	29.24	170.56	19.12	140.43	22
225	247	**Toyo Seikan**[6]	Japan	2,207,454	1,638,532	65,894	571,844	14,207	40.76	161.99	29.74	132.82	34
226	227	**Nippon Suisan**[6]	Japan	2,189,003	1,085,464	11,065	209,980	6,499	19.34	105.78	9.99	82.86	20
227	●	**Pioneer Concrete Services**[2]	Australia	2,187,690	1,502,779	76,025	466,562	8,752	37.56	31.90	2.32	(23.14)	29
228	199	**Lafarge Coppée**	France	2,186,005[3]	1,954,033[3]	55,484[3]	312,623[3]	22,488[3]	74.94	201.43	57.24	33.79	32
229	225	**SKF**	Sweden	2,178,651	2,428,492	120,821	753,701	45,766	23.21	429.23	12.67	152.69	34
230	219	**Jacobs Suchard**	Switzerland	2,173,410	790,424	51,118	298,479	10,632	6.99	42.58	(6.05)	(7.83)	20
231	233	**Toyobo**[24]	Japan	2,171,939	1,773,022	17,602	220,648	17,378	42.10	163.06	30.97	133.77	22
232	252	**Daihatsu Motor**[2]	Japan	2,167,838	1,261,395	23,158	326,612	16,494	21.87	38.19	12.32	22.90	40
233	218	**PETROGAL (Petróleos de Portugal)**[1]	Portugal	2,160,505	2,722,065	3,612	351,397	6,910	—	—	—	—	29
234	244	**Oji Paper**[6]	Japan	2,155,084	2,025,753	56,429	470,892	9,389	11.96	79.35	3.19	59.38	26
235	216	**Hawker Siddeley Group**	Britain	2,136,907	1,920,659	100,034	1,013,482	41,500	7.40	213.15	(0.26)	72.22	45
236	192	**Koa Oil**[6]	Japan	2,132,087[5]	1,575,351[5]	5,386[5]	168,461[5]	1,422[5]	4.35	(21.01)	(3.82)	(29.80)	29
237	271	**Fletcher Challenge**[2]	New Zealand	2,115,899	3,482,485	85,927	567,834	22,737	344.53	—	213.23	—	32
238	193	**Dunlop Holdings**	Britain	2,112,867	1,211,268	(129,550)	72,954	37,300	86.48	15.74	73.17	(36.34)	30
239	207	**VIAG**[1,25]	Germany	2,097,114[3]	1,897,431[3]	37,993[3]	513,467[3]	20,979[3]	—	—	—	—	33
240	249	**Oerlikon-Bührle**	Switzerland	2,095,405	2,775,740	6,378	1,242,830	30,898	15.38	(45.71)	1.31	(64.90)	34
241	280	**Nissan Shatai**[6]	Japan	2,079,304[5]	704,825[5]	13,328[5]	206,512[5]	6,834[5]	(1.80)	52.93	(9.49)	35.90	40
242	258	**Britoil**	Britain	2,068,393	2,361,046	226,245	552,019	2,718	(0.72)	—	(7.81)	—	29
243	248	**IMETAL**	France	2,050,572[3]	1,222,254[3]	18,987[3]	336,599[3]	15,000[3]	38.13	39.72	24.14	(37.98)	10
244	250	**Ajinomoto**[6]	Japan	2,041,582	1,759,008	54,508	761,717	10,592	17.58	157.40	8.37	128.73	20
245	272	**Johnson Matthey**[6]	Britain	2,023,860	1,030,544	(8,054)	505,138	11,335	(64.84)	(25.58)	(67.35)	(59.07)	33
246	259	**Moore**	Canada	2,020,801	1,187,714	125,733	795,818	26,256	(42.84)	(13.72)	(46.14)	(27.13)	27
247	208	**MBB**	Germany	2,007,894	1,971,157	34,408	252,861	35,500	—	—	—	—	41
248	245	**Lucas Industries**[26]	Britain	2,004,949	1,364,821	16,647	560,962	65,113	61.20	93.37	49.69	6.35	40
249	262	**Mitsui Toatsu Chemicals**[6]	Japan	2,000,746	2,144,365	(19,247)	45,139	8,000	50.00	61.84	38.24	43.81	28
250	293	**Ricoh**[6]	Japan	1,992,416	1,879,368	64,269	718,750	21,000	5.61	117.06	(2.65)	92.89	44

● Not on last year's list.

[23] Name changed from Esso on May 8, 1984.

[24] Figures are for fiscal year ended April 30, 1984.

[25] Name changed from Vereinigte Industrie-Unternehmungen on July 20, 1984.

[26] Figures are for fiscal year ended July 31, 1984.

RANK		COMPANY	COUNTRY	SALES	ASSETS	NET INCOME	STOCKHOLDERS' EQUITY	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT				INDUSTRY CODE
'84	'83			$000	$000	$000	$000		IN LOCAL CURRENCY 5/31/84-5/31/85	IN LOCAL CURRENCY 5-YEAR AVERAGE	IN U.S. DOLLARS 5/31/84-5/31/85	IN U.S. DOLLARS 5-YEAR AVERAGE	
251	268	**Fuji Electric**[6]	Japan	1,990,164	2,023,737	22,807	279,528	18,077	75.45	131.53	61.71	105.74	36
252	320	**Tokyo Sanyo Electric**[12]	Japan	1,984,778[5]	1,746,053[5]	77,551[5]	699,556[5]	13,275[5]	(1.35)	42.12	(9.08)	26.30	36
253	243	**Yamaha Motor**[24]	Japan	1,975,316	1,830,974	(160,725)	65,634	10,044	39.04	4.59	28.15	(7.04)	40
254	264	**Esso Nederland**	Netherlands	1,969,111[8]	703,983	(45,585)	201,543	1,536	—	—	—	—	29
255	●	**Hattori Seiko**[6]	Japan	1,966,561	1,502,799	29,681	269,188	7,149	—	—	—	—	46
256	297	**Mitsubishi Metal**[6]	Japan	1,964,267	2,278,389	20,263	145,731	8,832	3.18	287.15	(4.89)	244.04	33
257	215	**Hitachi Zosen**[6]	Japan	1,951,043	4,207,132	14,959	431,097	21,555	—	—	—	—	37
258	265	**Australian Consolidated Ind.**[6]	Australia	1,925,128	1,856,822	41,382	692,626	29,300	—	—	—	—	32
259	238	**Chemische Werke Hüls**	Germany	1,920,234[5]	954,867[5]	48,105[5]	318,381[5]	15,561[5]	—	—	—	—	28
260	277	**Mitsubishi Petrochemical**	Japan	1,916,835	1,696,264	35,793	143,887	2,900	55.76	39.79	43.55	24.22	28
261	284	**Showa Denko**	Japan	1,914,554	2,392,114	44,443	46,510	6,038	10.31	67.24	1.67	48.61	28
262	255	**Empresa Colombiana de Petról.** [1]	Colombia	1,906,654	1,540,214	28,447	N.A.	10,403	—	—	—	—	29
263	229	**Dome Petroleum**	Canada	1,889,831	5,989,029	(151,952)	(317,848)	6,000	5.02	(77.98)	(1.05)	(81.40)	29
264	204	**Metal Box**[6]	Britain	1,883,815	1,168,688	66,070	495,363	39,377	33.09	107.49	23.58	14.12	34
265	240	**Rolls-Royce**[1]	Britain	1,881,814	1,294,644	26,711	375,192	40,900	—	—	—	—	41
266	288	**Stelco**	Canada	1,863,107	2,120,708	(2,533)	1,183,083	20,612	(13.85)	(12.72)	(18.83)	(26.28)	33
267	283	**Dainippon Ink & Chemicals**[6]	Japan	1,861,635	1,718,358	19,861	301,869	9,149	21.85	30.12	12.31	15.63	28
268	335	**Sasol**[2]	South Africa	1,853,957	3,782,387	344,889	1,524,092	33,154	40.34	132.95	(9.25)	113.41	28
269	275	**Pilkington Brothers**[6]	Britain	1,846,977	2,742,606	28,934	1,291,738	44,300	16.47	98.79	8.16	9.33	32
270	431	**Seagram**[15]	Canada	1,831,463	5,304,645	317,546	2,782,581	14,000	40.75	212.12	32.61	163.60	49
271	263	**Plessey**[6]	Britain	1,825,137	994,930	163,018	704,111	38,838	(27.61)	244.76	(32.78)	89.61	36
272	234	**Northern Foods**[7]	Britain	1,824,713	578,499	6,296	254,944	22,891	42.25	199.60	32.09	64.77	20
273	461	**Chemie Linz**[1]	Austria	1,821,800	401,860	7,141	66,086	7,847	—	—	—	—	28
274	261	**L'Oréal**	France	1,807,448[3]	1,338,842[3]	81,128[3]	501,671[3]	27,117[3]	12.95	353.21	1.52	101.15	43
275	246	**Union International**	Britain	1,800,551	529,963	14,269	110,308	28,297	37.58	28.27	23.65	(43.06)	20
276	241	**Sulzer Brothers**	Switzerland	1,798,261	2,520,569	(7,654)	1,159,170	30,040	31.25	(14.25)	15.24	(44.57)	45
277	256	**Avions Marcel Dassault-Breguet**	France	1,794,639	3,101,660	49,377	314,280	16,196	220.55	134.93	188.10	4.27	41
278	●	**Premier Group**[6]	South Africa	1,782,932	1,558,995	102,104	943,144	34,018	—	—	—	—	20
279	274	**Imasco**[6]	Canada	1,779,179	1,590,081	165,451	773,947	55,000	54.84	444.61	45.89	359.95	21
280	294	**Jujo Paper**[6]	Japan	1,778,783	1,809,562	4,804	181,166	7,135	18.25	91.01	8.99	69.74	26
281	269	**Tarmac**	Britain	1,776,639	1,066,518	87,808	386,309	24,264	41.63	541.69	31.51	252.92	32
282	286	**Glaxo Holdings**[2]	Britain	1,762,429	1,588,139	245,012	916,991	25,053	63.63	1,415.22	51.95	733.35	42
283	314	**TDK**[12]	Japan	1,760,050	1,500,558	136,389	890,655	14,599	7.97	168.94	(0.48)	138.99	36
284	176	**Ranks Hovis McDougall**[27]	Britain	1,756,238	882,535	35,074	408,583	37,973	96.76	359.59	82.72	152.77	20
285	267	**Gallaher**	Britain	1,753,402	1,230,632	85,188	430,668	30,345	—	—	—	—	21
286	285	**Vauxhall Motors**	Britain	1,747,183[8]	693,410	(12,554)	(61,018)	12,573	—	—	—	—	40
287	312	**Nippon Light Metal**[6]	Japan	1,746,401	1,996,734	91,893	141,330	10,300	(0.37)	(0.37)	(8.18)	(11.47)	34
288	311	**Brooke Bond Group**[2]	Britain	1,726,120[3]	873,280[3]	47,347[3]	416,345[3]	62,834[3]	92.34	253.69	78.60	94.52	20
289	281	**Schering**	Germany	1,716,189	1,397,615	48,604	350,320	23,039	51.44	213.79	35.40	82.75	42
290	296	**John Labatt**[24]	Canada	1,715,337	923,000	53,664	349,784	10,500	58.86	—	49.68	—	20
291	186	**Bowater Industries**[28]	Britain	1,691,362	914,125	27,112	113,252	24,800	—	—	—	—	26
292	319	**News Corp.**[2]	Australia	1,690,947	1,808,590	32,131	849,673	20,000	92.66	737.52	43.30	387.94	27
293	418	**Sanyo-Kokusaku Pulp**[6]	Japan	1,689,443[5]	1,642,968[5]	17,478[5]	107,996[5]	7,814[5]	26.25	110.98	16.36	87.48	26
294	289	**Vale do Rio Doce**[1]	Brazil	1,684,642	4,863,340	915,191	2,353,855	20,299	—	—	—	—	10
295	278	**Charbonnages de France**[1]	France	1,676,717	2,989,509	(24,326)	251,137	50,978	—	—	—	—	28
296	295	**KHD (Klöckner-Humboldt-Deutz)**	Germany	1,670,961	998,240	21,553	234,273	21,644	—	—	—	—	45
297	292	**Hino Motors**[6]	Japan	1,662,229[5]	1,057,273[5]	17,431[5]	294,514[5]	8,462[5]	(1.73)	16.78	(9.43)	3.77	40
298	302	**Nippon Gakki**[24]	Japan	1,662,045	1,342,119	20,421	449,656	18,626	166.09	144.84	145.24	117.57	47
299	270	**Tabacalera**[1]	Spain	1,657,501	554,926	7,344	48,835	8,614	97.34	200.94	74.70	21.66	21
300	331	**Blue Circle Industries**	Britain	1,651,829	1,931,428	89,349	1,153,831	18,998	39.54	111.59	29.58	16.37	32

● Not on last year's list.

N.A. Not available.

[27] Figures are for fiscal year ended August 31, 1984.

[28] Name changed from Bowater Corp. on July 20, 1984.

RANK '84	'83	COMPANY	COUNTRY	SALES $000	ASSETS $000	NET INCOME $000	STOCKHOLDERS' EQUITY $000	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY 5/31/84-5/31/85	IN LOCAL CURRENCY 5-YEAR AVERAGE	IN U.S. DOLLARS 5/31/84-5/31/85	IN U.S. DOLLARS 5-YEAR AVERAGE	INDUSTRY CODE
301	336	Abitibi-Price	Canada	1,650,143	1,378,270	54,155	688,405	14,793	135.29	222.14	121.69	172.07	26
302	287	MacMillan Bloedel	Canada	1,642,754	1,707,422	14,902	747,144	14,994	(8.75)	(2.50)	(14.03)	(17.65)	26
303	251	Mobil Oil	Britain	1,642,410[8]	794,688	(37,436)	239,619	3,146	—	—	—	—	29
304	322	Daido Steel[1]	Japan	1,641,977	1,378,508	23,205	226,431	11,216	4.87	53.85	(3.33)	36.72	33
305	369	SNECMA[1]	France	1,628,490	2,345,487	6,707	126,833	25,475	—	—	—	—	41
306	300	Nisshin Steel[4]	Japan	1,628,463	2,268,440	7,852	399,853	9,964	(11.19)	29.92	(18.14)	15.45	33
307	276	Mobil Oil Française	France	1,609,905[5,8]	699,633[5]	0[5]	246,793[5]	2,172[5]	[illegible]	—	—	—	29
308	321	Sekisui Chemical[4]	Japan	1,604,491	1,489,557	21,664	282,318	8,374	38.17	75.17	27.34	55.67	28
309	230	Klöckner-Werke[7]	Germany	1,603,141	1,674,835	745	245,094	18,064	18.36	72.50	5.82	0.46	33
310	290	De Beers Consolidated Mines	South Africa	1,600,382	4,395,016	510,720	3,202,985	20,000	21.60	38.61	(21.37)	26.98	10
311	359	Aisin Seiki[4]	Japan	1,592,262	1,054,136	33,377	437,633	10,020	4.25	98.30	(3.91)	76.22	40
312	291	RMC Group	Britain	1,582,246	846,498	53,556	276,878	17,089	4.33	207.21	(3.11)	68.96	32
313	310	Domtar	Canada	1,578,437	1,151,093	72,502	576,833	15,408	26.30	103.35	19.00	71.74	26
314	324	Nippon Meat Packers[20]	Japan	1,577,604	681,863	29,086	305,874	10,300	34.78	44.20	24.22	28.14	20
315	279	Standard Elektrik Lorenz[15]	Germany	1,577,203[8]	766,038	17,977	197,464	31,041	(0.30)	96.89	(10.86)	14.66	36
316	339	Matra[1]	France	1,570,504[3]	1,926,677[3]	7,838[3]	171,344[3]	28,000[3]	32.96	(2.19)	19.50	(56.58)	41
317	301	Entreprise Minière et Chimique[1]	France	1,569,714	780,001	6,689	45,729	12,761	—	—	—	—	10
318	317	Nisshin Flour Milling[4]	Japan	1,563,931	673,749	27,942	262,816	3,602	17.99	82.30	8.75	62.00	20
319	361	Heineken	Netherlands	1,562,114	1,397,475	71,367	584,841	25,112	20.13	313.25	7.39	134.46	49
320	363	Nokia	Finland	1,558,459	1,575,107	14,237	235,967	27,874	(56.16)	—	(59.97)	—	34
321	299	Bull[1]	France	1,554,953	650,594	55,921	122,125	26,453	—	—	—	—	44
322	260	Metallurgie Hoboken-Overpelt[7]	Belgium	1,554,704[3]	649,123[3]	10,152[3]	167,952[3]	6,776[3]	10.86	194.68	1.69	36.86	33
323	313	Shiseido[12]	Japan	1,554,503	1,416,638	64,615	745,184	12,949	8.14	48.06	(0.32)	31.57	43
324	323	Meiji Milk Products[4]	Japan	1,550,792	628,997	7,937	152,058	6,300	24.70	140.61	14.93	113.01	20
325	316	Rowntree Mackintosh	Britain	1,550,727	935,896	62,104	454,631	32,400†	80.56	269.51	67.67	103.22	20
326	307	Mitsui Mining[4]	Japan	1,542,699	1,150,345	5,494	78,029	2,015	20.39	(34.92)	10.96	(42.17)	10
327	372	Massey-Ferguson[10]	Canada	1,534,969	1,580,910	(68,012)	285,393	23,751	—	—	(5.78)	—	45
328	266	CODELCO-CHILE[1]	Chile	1,534,653	3,569,639	143,721	2,111,143	25,339	—	—	—	—	10
329	392	Sumitomo Metal Mining[4]	Japan	1,531,194	1,257,063	5,863	237,086	5,405	9.56	962.35	0.98	844.04	33
330	298	Babcock International	Britain	1,508,876	813,545	21,918	228,453	24,767	22.18	190.51	13.45	59.77	45
331	342	Daishowa Paper[4]	Japan	1,507,755	1,858,150	21,207	112,982	6,044	0.51	106.64	(7.36)	83.63	26
332	306	Reckitt & Colman	Britain	1,501,712	876,571	73,723	482,678	34,800	25.20	303.62	16.26	121.98	20
333	338	Sankyo[4]	Japan	1,492,331	1,258,096	43,409	458,910	5,354	107.85	215.66	91.57	180.51	42
334	254	Vallourec	France	1,489,899	784,633	(20,212)	187,025	30,893	88.26	91.98	69.20	(14.78)	34
335	351	Dofasco	Canada	1,487,228	1,667,759	139,448	877,565	13,316	33.48	178.51	25.77	135.22	33
336	308	Genstar	Canada	1,484,626	2,053,603	101,729	971,544	18,000	57.16	32.95	48.07	12.29	32
337	327	Unitika[4]	Japan	1,477,029	1,395,399	305	81,410	7,472	65.47	143.86	52.51	116.70	22
338	439	Inco	Canada	1,467,984	3,110,419	(77,343)	1,315,623	22,239	44.48	(15.37)	36.13	(28.52)	10
339	390	Oki Electric Industry[4]	Japan	1,461,955	1,515,644	39,108	284,538	17,027	(15.89)	—	(22.48)	—	36
340	346	Fed. Volksbeleggings Beperk[4]	South Africa	1,461,717	972,143	32,216	265,041	49,000	(43.00)	(16.50)	(63.14)	(23.50)	20
341	353	Kao[4]	Japan	1,454,912	1,160,325	29,732	423,422	5,124	31.07	215.79	20.81	180.62	43
342	417	Boehringer Ingelheim	Germany	1,448,605	1,414,897	42,482	525,515	21,880	—	—	—	—	42
343	334	SSAB (Svenskt Stål)[1]	Sweden	1,445,023	1,246,633	24,164	412,465	15,202	—	—	—	—	33
344	486	Yamazaki Baking	Japan	1,444,453	788,876	34,627	318,605	13,342	26.68	93.12	16.76	71.62	20
345	393	Honshu Paper[4]	Japan	1,438,242	1,910,874	1,769	101,402	6,146	6.36	103.95	(1.97)	81.24	26
346	337	Coats Patons	Britain	1,437,070	1,064,316	99,500	499,445	42,900	52.58	334.82	41.69	139.14	22
347	304	Union Laitière Normande	France	1,433,568	452,004	784	38,426	7,350	—	—	—	—	20
348	309	Statsforetag Group[1]	Sweden	1,427,504	1,349,026	7,008	220,479	24,901	—	—	—	—	45
349	328	Empresa Nacional del Petróleo[1]	Chile	1,416,429	994,717	60,342	553,300	3,531	—	—	—	—	29
350	329	Sumitomo Heavy Industries[4]	Japan	1,415,935	1,895,800	25,927	209,838	9,500	18.09	10.53	8.84	(1.77)	45

RANK '84	'83	COMPANY	COUNTRY	SALES $000	ASSETS $000	NET INCOME $000	STOCKHOLDERS' EQUITY $000	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY 3/31/84–3/31/85	5-YEAR AVERAGE	IN U.S. DOLLARS 3/31/84–3/31/85	5-YEAR AVERAGE	INDUSTRY CODE
351	305	**Fuji Kosan**	Japan	1,407,503	871,515	(109,240)	(278,634)	848	(7.40)	(60.77)	(14.66)	(65.14)	29
352	315	**AECI**	South Africa	1,399,876	899,041	77,897	399,625	24,800	(8.01)	35.88	(40.52)	24.48	28
353	355	**Svenska Cellulosa**	Sweden	1,397,661	1,467,446	37,213	297,273	15,400	(9.51)	—	(17.25)	—	26
354	367	**Konishiroku Photo Industry**	Japan	1,396,372	1,442,332	44,196	534,904	9,500	25.33	77.73	15.51	57.93	28
355	428	**Grupo Industrial Alfa**	Mexico	1,389,683	2,750,106	(23,894)	185,890	30,876	—	—	—	—	33
356	333	**Onoda Cement**	Japan	1,379,459	1,755,448	10,650	233,433	7,350	74.76	218.58	61.06	183.11	32
357	●	**Shin-Etsu Chemical**	Japan	1,377,337	1,222,273	61,157	293,808	8,088	—	—	—	—	28
358	356	**Pioneer Electronic**	Japan	1,365,247	1,056,877	34,417	582,454	11,961	(25.84)	34.29	(31.65)	19.33	36
359	347	**Sandvik Group**	Sweden	1,365,160	1,459,989	57,028	257,652	23,994	(7.08)	131.40	(15.03)	10.49	33
360	341	**Redland**	Britain	1,364,502	910,369	74,571	378,063	12,110	22.86	137.90	14.09	30.88	32
361	357	**Dunlop Olympic**	Australia	1,362,881	696,896	55,557	309,783	19,541	82.65	384.75	35.86	182.42	30
362	349	**Unión Explosivos Río Tinto**	Spain	1,357,176	1,112,551	(64,320)	244,408	8,517	—	—	—	—	29
363	223	**Chiyoda Chemical Eng. & Const.**	Japan	1,353,192	1,427,335	103,632	445,755	3,831	(17.44)	42.57	(23.91)	26.70	45
364	350	**Holderbank Financière Glaris**	Switzerland	1,344,447	2,669,795	53,580	1,140,498	18,545	—	—	—	—	32
365	364	**Mitsui Petrochemical**	Japan	1,341,655	1,570,932	16,487	171,172	4,908	56.31	132.10	44.06	106.25	28
366	253	**Mobil Oil Italiana**	Italy	1,325,385	623,966	(32,752)	18,079	1,253	—	—	—	—	29
367	370	**Mitsui Engineering & Shipbldg.**	Japan	1,323,540	2,312,980	14,914	335,724	13,220	15.65	9.76	6.58	(2.46)	45
368	257	**British Shipbuilders**	Britain	1,322,632	882,040	(346,053)	322,840	48,500	—	—	—	—	37
369	420	**Mitsubishi Rayon**	Japan	1,319,737	1,345,099	13,503	187,435	5,967	23.04	228.79	13.40	192.18	22
370	384	**Mitsui Mining & Smelting**	Japan	1,318,255	1,265,628	9,545	77,553	7,742	5.95	317.05	(2.34)	270.61	33
371	●	**Mitsubishi Mining & Cement**	Japan	1,314,890	1,379,466	8,267	259,439	5,856	—	—	—	—	32
372	●	**Hillsdown Holdings**	Britain	1,313,129	363,033	23,372	120,664	14,069	—	—	—	—	20
373	379	**Meiji Seika**	Japan	1,312,960	819,825	20,043	337,419	5,651	10.75	136.77	2.07	110.40	20
374	358	**PETROPERU**	Peru	1,309,971	782,542	8,676	78,566	9,821	—	—	—	—	29
375	●	**Nippon Reizo Kabushiki**	Japan	1,305,666	532,808	10,024	140,141	4,355	—	—	—	—	20
376	352	**Oljekonsumenternas Förbund**	Sweden	1,304,170	695,648	8,168	59,143	5,893	—	—	—	—	29
377	330	**TI Group**	Britain	1,297,103	709,043	11,887	252,676	28,000	34.55	43.85	24.94	(20.88)	34
378	360	**Koninklijke Wessanen**	Netherlands	1,287,956	349,694	14,977	136,603	3,929	—	—	—	—	20
379	374	**Valeo**	France	1,272,272	856,350	(13,862)	139,459	31,700	10.81	5.09	(0.40)	(53.35)	40
380	●	**Commodore International**	Bahamas	1,267,165	679,076	143,800	324,436	6,633	—	—	—	—	44
381	366	**Hachette**	France	1,262,623	613,629	30,353	184,019	12,400	40.49	798.35	26.27	298.72	27
382	391	**Kuraray**	Japan	1,255,519	1,333,499	5,617	109,362	8,597	101.92	772.41	86.10	675.26	28
383	326	**Béghin-Say**	France	1,254,923	1,183,404	2,413	206,530	7,950	2.57	127.13	(7.80)	(7.17)	20
384	380	**Morinaga Milk Industry**	Japan	1,253,140	525,869	6,083	117,580	4,526	5.71	160.46	(2.56)	131.45	20
385	385	**Consolidated-Bathurst**	Canada	1,253,132	1,267,998	45,478	466,319	14,395	13.59	151.02	7.03	112.00	26
386	●	**Alps Electric**	Japan	1,248,232	1,058,974	54,529	344,431	10,703	—	—	—	—	36
387	343	**Continental Gummi-Werke**	Germany	1,240,761	623,048	14,423	161,651	26,401	17.43	174.53	4.99	59.89	30
388	197	**Philippine National Oil**	Philippines	1,240,442	1,446,642	42,435	264,138	9,316	—	—	—	—	29
389	406	**Rauma-Repola**	Finland	1,234,590	1,508,698	63,973	149,687	17,876	(18.24)	—	(25.35)	—	26
390	303	**Consolidated Gold Fields**	Britain	1,227,237	1,820,272	103,843	915,905	12,679	3.45	47.91	(3.93)	(18.65)	32
391	354	**Racal Electronics**	Britain	1,216,478	1,204,838	112,723	529,857	19,000	(13.27)	71.43	(19.46)	(5.71)	36
392	377	**Molson**	Canada	1,215,385	772,904	41,383	299,897	11,000	10.31	39.58	3.93	17.88	49
393	332	**Distillers**	Britain	1,203,279	2,138,569	177,181	1,599,075	15,200	11.75	97.33	3.77	8.53	49
394	402	**Itoham Foods**	Japan	1,197,246	557,473	17,036	282,372	5,536	—	—	—	—	20
395	●	**Bharat Heavy Electricals**	India	1,190,843	2,096,291	36,386	392,022	73,180	—	—	—	—	45
396	340	**PETRONOR**	Spain	1,190,235	768,467	21,585	219,974	705	—	—	—	—	29
397	389	**SNIA BPD**	Italy	1,189,943	1,358,543	66,370	253,883	14,299	—	—	—	—	28
398	411	**Mitsubishi Gas Chemical**	Japan	1,187,757	1,148,721	15,806	267,680	4,620	20.02	19.43	10.62	6.13	28
399	434	**Toyota Auto Body**	Japan	1,182,627	356,347	8,500	99,244	6,576	20.76	102.81	11.29	80.22	40
400	397	**Swedish Match**	Sweden	1,181,029	927,546	54,974	174,736	25,900	8.95	306.45	(0.36)	94.07	26

● Not on last year's list

[29] Figures are for fiscal year ended April 20, 1984.

[30] Name changed from Ito Ham Provisions on June 1, 1984.

RANK '84	RANK '83	COMPANY	COUNTRY	SALES $000	ASSETS $000	NET INCOME $000	STOCKHOLDERS' EQUITY $000	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY 5-31-84 5-31-85	IN LOCAL CURRENCY 5-YEAR AVERAGE	IN U.S. DOLLARS 5-31-84 5-31-85	IN U.S. DOLLARS 5-YEAR AVERAGE	INDUSTRY CODE
401	382	**Gulf Oil Great Britain**	Britain	1,180,460*	N.A.	(87,933)*	N.A.	N.A.	—	—	—	—	29
402	399	**Yokohama Rubber**	Japan	1,179,742	960,086	4,247	77,266	10,675	31.88	24.10	21.54	10.28	30
403	344	**Northern Engineering Industries**	Britain	1,179,457	906,496	(13,063)	197,684	29,937	7.43	211.09	(0.23)	71.09	45
404	394	**Nichiro Gyogyo**	Japan	1,178,503	595,273	5,561	38,606	3,642	—	—	—	—	20
405	387	**Kyowa Hakko Kogyo**	Japan	1,156,088	1,047,015	26,735	315,465	6,415	12.04	160.45	3.26	131.45	28
406	383	**Suncor**	Canada	1,155,934	1,804,897	95,540	954,525	5,580	—	—	—	—	29
407	421	**Enso-Gutzeit**	Finland	1,149,262	1,629,415	11,603	356,092	13,402	—	—	(8.70)	—	26
408	405	**Nixdorf Computer**	Germany	1,149,028	1,034,675	41,182	432,743	20,193	—	—	—	—	44
409	404	**Wellcome Foundation**	Britain	1,144,523	1,045,608	65,572	549,150	18,609	—	—	—	—	42
410	412	**Rutgerswerke**	Germany	1,142,804	476,066	12,802	107,357	11,579	25.71	80.55	12.40	5.15	28
411	410	**Yoshida Kogyo**	Japan	1,141,779	2,038,781	65,285	517,055	14,011	—	—	—	—	32
412	348	**Ford Brasil**	Brazil	1,137,462*	650,867	52,585*	131,044	21,300	—	—	—	—	40
413	●	**Doosan Group**	South Korea	1,137,267	941,781	20,785	188,256	11,822	—	—	—	—	38
414	438	**Ford España**	Spain	1,129,321	608,560	75,137	115,274	8,994	—	—	—	—	40
415	396	**Pearson**[11]	Britain	1,126,169	960,738	81,299	457,500	27,872	57.66	214.03	46.40	127.71	27
416	371	**Bosch-Siemens Hausgeräte**	Germany	1,125,564	442,176	N.A.	130,068*	14,264	—	—	—	—	36
417	409	**Lion**	Japan	1,123,474	607,432	15,279	204,825	4,593	56.02	97.07	43.79	75.13	28
418	375	**Rheinische Braunkohlenwerke**	Germany	1,119,621	2,184,989	456	293,471	16,918	—	—	—	—	10
419	426	**ENSIDESA**	Spain	1,115,103	1,851,632	(152,948)	245,793	21,012	—	—	—	—	33
420	448	**Motor Oil (Hellas) Corinth**	Greece	1,114,405	407,117	2,678	22,564	1,120	—	—	—	—	29
421	●	**KF Industri**	Sweden	1,107,520	660,174	7,079	91,623	14,769	—	—	—	—	26
422	381	**Amatil**	Australia	1,101,853	657,731	42,317	313,928	12,055	53.06	346.69	13.85	160.25	21
423	376	**Arla**	Sweden	1,099,861	449,612	5,387	73,464	7,678	—	—	—	—	20
424	407	**Atlas Copco**	Sweden	1,099,426	914,480	33,963	265,765	16,484	0.30	167.19	(8.27)	27.58	45
425	386	**Canadian General Electric**	Canada	1,094,635	769,498	30,732	381,942	12,300	72.27	186.61	62.31	142.06	36
426	415	**Zahnradfabrik Friedrichshafen**	Germany	1,093,601	810,545	16,058	102,143	21,548	(0.54)	—	(11.07)	—	40
427	433	**SEAT**	Spain	1,087,009	2,202,863	(224,905)	123,143	23,610	—	—	—	—	40
428	368	**Alfa-Laval**	Sweden	1,083,320	1,149,994	13,218	255,170	16,030	11.43	304.05	1.90	92.92	45
429	395	**Burns Philp**	Australia	1,076,293	636,020	11,195	265,772	13,675	32.27	112.91	(1.60)	24.04	32
430	408	**W.C. Heraeus**	Germany	1,075,398	355,578	12,424	83,878	6,770	—	—	—	—	33
431	427	**Lesieur**	France	1,074,008	500,301	6,442	133,982	6,712	(41.50)	61.34	(47.42)	(29.38)	20
432	●	**Industrias Votorantim**	Brazil	1,072,557	1,349,972	195,479	1,020,707	56,259	—	—	—	—	10
433	468	**Toyoda Automatic Loom Works**	Japan	1,070,369	835,128	38,685	509,669	6,400	2.84	43.42	(5.21)	27.45	40
434	455	**Toyo Soda Manufacturing**	Japan	1,069,502	1,378,363	31,159	140,529	5,439	53.46	158.86	41.43	130.03	28
435	●	**Kyocera**	Japan	1,063,233	1,451,404	125,524	1,122,327	15,770	—	—	—	—	36
436	443	**Kanto Auto Works**	Japan	1,062,725	303,088	7,973	74,670	5,727	9.76	77.32	1.16	57.57	40
437	●	**Merck**	Germany	1,059,326	N.A.	N.A.	N.A.	20,316	—	—	—	—	28
438	362	**Grundig**	Germany	1,058,613	934,131	(108,813)	167,709	24,114	—	—	—	—	36
439	419	**Esselte**	Sweden	1,052,716	865,576	24,563	168,091	15,770	44.22	244.72	31.88	64.59	44
440	424	**PWA**	Germany	1,043,833	524,078	26,079	67,306	9,750	—	—	—	—	26
441	422	**Freudenberg**	Germany	1,043,084	648,653	N.A.	230,207	22,450	—	—	—	—	28
442	432	**Wärtsilä**	Finland	1,039,442	1,593,265	26,850	211,285	17,551	(20.67)	—	(27.57)	—	37
443	373	**Vaal Reefs Exploration & Mining**	South Africa	1,033,823	612,439	290,180	604,600	44,279	20.26	314.98	(22.23)	290.17	10
444	398	**General Motors do Brasil**	Brazil	1,030,803	564,115	7,156	160,520	21,176	—	—	—	—	40
445	472	**China Steel**	Taiwan	1,026,476	2,669,349	110,970	1,603,598	7,620	—	—	—	—	33
446	444	**Denki Kagaku Kogyo**	Japan	1,014,549	1,248,178	(16,051)	202,007	5,450	—	—	—	—	28
447	●	**Alcoa of Australia**	Australia	1,012,286	1,954,442	38,444	943,170	5,870	—	—	—	—	10
448	403	**Nissan Diesel Motor**	Japan	1,009,907	1,043,039	4,393	369,601	6,685	33.91	13.19	23.42	0.58	40
449	460	**Nippon Seiko**	Japan	1,001,423	1,258,894	35,451	443,432	10,026	16.10	88.30	7.01	67.33	45
450	378	**Zanussi Group**	Italy	1,001,243	N.A.	N.A.	53,719	23,750	—	—	—	—	36

● Not on last year's list.
N.A. Not available
* Fortune estimate
[11] Name changed from S. Pearson & Son on June 1, 1984.

RANK '84	RANK '83	COMPANY	COUNTRY	SALES $000	ASSETS $000	NET INCOME $000	STOCKHOLDERS' EQUITY $000	EMPLOYEES	TOTAL RETURN TO INVESTORS PERCENT IN LOCAL CURRENCY 5/31/84-5/31/85	IN LOCAL CURRENCY 5-YEAR AVERAGE	IN U.S. DOLLARS 5/31/84-5/31/85	IN U.S. DOLLARS 5-YEAR AVERAGE	INDUSTRY CODE
451	500	Stora Kopparbergs Bergslags	Sweden	1,000,232	1,869,048	25,856	270,195	17,913	—	—	—	—	26
452	458	Valmet	Finland	999,796	755,505	15,185	128,299	16,258	—	—	—	—	45
453	450	Citizen Watch	Japan	996,906	1,019,444	38,147	358,937	10,489	(0.92)	67.56	(8.68)	48.90	38
454	429	Hispanoil	Spain	996,601	253,153	36,909	49,643	262	—	—	—	—	29
455	487	Showa Sangyo	Japan	989,243	529,908	3,334	122,122	2,330	25.38	44.19	15.55	28.13	20
456	454	Douwe Egberts	Netherlands	986,898	709,864	37,225	294,576	8,092	—	—	—	—	20
457	423	IMI	Britain	985,515	652,186	34,458	267,151	20,544†	69.30	195.37	57.2[illegible]	62.44	34
458	442	ARBED	Luxembourg	982,000[5]	1,558,707[5]	11,157[5]	287,651[5]	14,226[5]	9.37	(11.34)	0.32	(58.82)	33
459	436	Nihon Cement	Japan	981,852	1,603,608	(7,032)	179,863	5,881	52.79	53.38	40.82	36.30	32
460	●	Omron Tateisi Electronics	Japan	979,708	993,758	42,122	418,763	5,231	—	—	—	—	36
461	440	Sumitomo Rubber	Japan	977,800	815,413	6,949	66,395	6,900	—	—	—	—	30
462	441	FAG Kugelfischer Georg Schäfer	Germany	977,059	807,552	41,290	111,970	28,062	—	—	—	—	34
463	447	Shionogi	Japan	976,592	973,815	42,884	556,040	8,420	43.13	160.75	31.91	131.71	42
464	490	GECAMINES	Zaire	971,000	2,002,000	43,000	1,436,000	35,846	—	—	—	—	10
465	452	Ebara	Japan	969,573	986,687	15,753	255,352	5,923	42.79	45.20	31.60	29.03	45
466	470	Elkem	Norway	964,338	908,031	33,304	115,512	10,403	(8.13)	112.67	(18.88)	17.84	33
467	437	Prouvost	France	960,587	635,774	14,056	100,901	16,682	250.23	622.76	214.78	220.79	22
468	489	USIMINAS	Brazil	959,536[3]	1,920,136[3]	59,338[3]	756,109[3]	14,606[3]	—	—	—	—	33
469	465	NTN Toyo Bearing	Japan	956,710	1,115,699	47,635	365,801	7,958	3.66	113.09	(4.45)	89.36	40
470	464	Royal Pkg. Industries Van Leer	Netherlands	956,157	511,355	29,639	210,377	13,747	—	—	—	—	34
471	462	Rengo	Japan	953,078	577,798	8,991	132,601	4,300	(5.55)	42.44	(12.95)	26.58	26
472	416	Driefontein Consolidated	South Africa	939,263	1,119,659	307,941	746,280	28,039	9.28	152.99	(29.33)	131.77	10
473	414	Chevron Oil Italiana	Italy	938,996[8]	215,000	15	24,439	825	—	—	—	—	29
474	●	Nan Ya Plastics	Taiwan	925,499	428,429	49,244	249,130	10,492	—	—	—	—	30
475	449	Carl-Zeiss-Stiftung	Germany	924,679	748,025	13,059	104,385	23,549	—	—	—	—	38
476	●	Austria Tabakwerke	Austria	924,521	318,742	8,587	110,789	2,217	—	—	—	—	21
477	●	Nisshinbo	Japan	924,238	644,430	26,453	365,921	7,532	43.09	114.13	31.87	90.28	22
478	●	Ivaco	Canada	921,856	845,373	26,121	277,592	8,200	—	—	—	—	34
479	467	Porsche	Germany	921,819	408,798	34,148	112,858	6,512	26.54	—	13.14	—	40
480	●	Casio Computer	Japan	921,099	873,265	37,499	354,668	6,880	—	—	—	—	44
481	401	Anonima Petroli Italiana	Italy	918,198	208,651	235	37,309	1,031	—	—	—	—	29
482	●	Syntex	Panama	916,461	1,093,114	134,633	602,202	11,000	—	—	—	—	42
483	413	Linde	Germany	913,677[3]	892,124[3]	20,033[3]	181,949[3]	13,907[3]	26.02	75.35	12.68	2.12	45
484	463	Pakistan State Oil	Pakistan	912,398	118,566	8,392	27,322	1,972	—	—	—	—	29
485	481	Fujisawa Pharmaceutical	Japan	907,515	1,190,736	42,249	680,285	6,000	18.39	64.35	9.11	46.05	42
486	●	Minolta Camera	Japan	905,390	1,005,673	18,104	235,195	8,800	—	—	—	—	44
487	●	Valores Industriales	Mexico	904,140	1,369,758	75,664	180,615	33,212	105.35	—	38.95	—	49
488	457	Du Pont Canada	Canada	903,837[8]	477,114	31,797	234,678	5,017	6.92	46.81	0.74	23.99	28
489	476	Siderurgica Nacional	Brazil	896,986	3,804,867	(165,877)	1,445,970	27,208	—	—	—	—	33
490	●	MIM Holdings	Australia	895,376	2,605,091	24,670	833,165	8,700	10.25	(2.98)	(17.99)	(43.47)	10
491	400	John Brown	Britain	891,090	564,972	(65,272)	53,744	11,296	55.00	(20.57)	43.93	(56.31)	45
492	499	Daicel Chemical Industries	Japan	889,724	874,874	24,361	211,960	4,050	50.32	161.24	38.54	132.15	28
493	435	Jefferson Smurfit Group	Ireland	886,516	645,291	21,712	211,247	12,119	(12.21)	1.16	(19.89)	(50.45)	26
494	482	Prima Meat Packers	Japan	885,834	347,617	2,963	72,810	3,778	12.78	(8.56)	3.94	(18.74)	20
495	●	Daikin	Japan	881,606	732,719	18,460	150,364	6,[illegible]20	—	—	—	—	45
496	●	Kanegafuchi	Japan	878,976	702,180	13,418	229,944	4,447	29.21	120.96	19.09	96.35	28
497	475	Kymmene-Stromberg	Finland	873,868	1,063,566	12,536	260,361	14,875	(35.43)	—	(41.05)	—	26
498	●	Nippon Sheet Glass	Japan	873,495	925,228	24,890	277,593	6,809	—	—	—	—	32
499	●	Sumitomo Light Metal Industries	Japan	870,295	1,205,611	(21,097)	13,553	2,154	99.45	152.21	83.82	124.13	33
500	425	Norddeutsche Affinerie	Germany	868,998[5]	202,107[5]	5,284[5]	63,802[5]	3,199[5]	37.23	14.17	22.69	(33.50)	33
		TOTALS		1,878,024,505	1,588,634,846	44,623,177	477,611,053	18,931,865					

● Not on last year's list.

[18] Figures are for fiscal year ended March 20, 1985.

[19] Name changed from Nisshin Spinning on July 19, 1984.

[20] Figures are for fiscal year ended April 20, 1985.

CHANGES IN SALES

THE TEN BIGGEST INCREASES

	Sales rank	
Ford Brasil	412	159.5%
Petróleos de Venezuela	24	126.2
Chemie Linz	273	109.8
Standard Telephones & Cables	190	88.2
Henkel	157	88.1
Seagram	270	86.6
Commodore International	380	86.0
Yamazaki Baking	344	81.3
Sanyo-Kokusaku Pulp	293	63.9
BTR	98	56.0

THE TEN BIGGEST DECREASES

Philippine National Oil	388	48.5%
VÖEST-Alpine	130	43.0
Chiyoda Chemical Eng. & Const.	363	36.6
Ranks Hovis McDougall	284	32.5
Bowater Industries	291	31.2
Mobil Oil Italiana	366	29.1
British Shipbuilders	368	27.6
George Weston Holdings	117	26.6
Esso Belgium	204	25.9
Klöckner-Werke	309	23.3

THE INDUSTRY MEDIANS

	Increases
Paper and wood products	9.8%
Chemicals	9.2
Electronics, appliances	9.0
Measuring and scientific equipment	8.8
Motor vehicles and parts	8.4
Office equipment, computers	8.2
Food	7.5
Publishing, printing	7.3
Textiles	6.8
Pharmaceuticals	6.0
Metal manufacturing	4.2
Metal products	4.0
Beverages	4.0
Mining	3.7
Rubber products	3.6
Petroleum refining	2.9
Industrial and farm equipment	2.1
Building materials	1.4
	Decreases
Aerospace	5.5%
Shipbuilding, transportation equipment	3.1
Tobacco	2.2
Soaps, cosmetics	N.A.

CHANGES IN PROFITS

THE TEN BIGGEST INCREASES*

	Sales rank	
Atlas Copco	424	9551.2%
Motor Oil (Hellas) Corinth	420	4954.3
Mitsubishi Petrochemical	260	4005.7
Jujo Paper	280	3325.3
Metal Box	264	1821.1
Rhône-Poulenc	74	1669.2
Courtaulds	170	1465.8
Pilkington Brothers	269	1054.2
Matsushita Electric Works	211	937.0
Honshu Paper	345	783.0

THE TEN BIGGEST DECREASES*

Chevron Oil Italiana	473	99.6%
Nippon Steel	31	97.5
Kawasaki Steel	99	95.9
Showa Oil	121	93.9
Idemitsu Kosan	40	91.0
Northern Foods	272	85.9
Béghin-Say	383	85.4
Hoesch	199	83.7
Korea Explosives Group	185	82.4
Statsföretag Group	348	80.0

THE INDUSTRY MEDIANS

	Increases
Metal manufacturing	153.7%
Metal products	150.0
Paper and wood products	122.3
Textiles	100.8
Rubber products	73.0
Chemicals	47.8
Electronics, appliances	31.3
Measuring and scientific equipment	30.6
Mining	27.2
Office equipment, computers	26.3
Building materials	26.1
Publishing, printing	23.5
Motor vehicles and parts	22.9
Food	17.3
Aerospace	15.6
Pharmaceuticals	12.6
Tobacco	12.3
Industrial and farm equipment	9.1
Petroleum refining	8.6
Beverages	7.8
	Decreases
Shipbuilding, transportation equipment	41.2%
Soaps, cosmetics	N.A.

* Listings exclude money losers.

THE MONEY LOSERS

	Sales rank	Loss $000
YPF* (Yacimientos Petróleros)*	60	3,592,682
Renault*	30	1,435,861
Sacilor*	110	920,006
Usinor*	105	845,921
British Steel*	88	381,804
Texaco (Britain)*	133	366,835
British Shipbuilders*	368	346,053
EFIM*	198	323,694
Michelin*	86	256,455
Adam Opel	101	244,034
SEAT*	427	224,905
Steel Authority of India*	171	208,004
Siderúrgica Nacional*	489	165,877
Yamaha Motor*	253	160,725
Salzgitter	146	153,279
ENSIDESA*	419	152,948
Dome Petroleum*	263	151,952
Dunlop Holdings*	238	129,550
Fuji Kosan*	351	109,240
Grundig	438	108,813
Ford-Werke (Germany)	102	104,647
Gulf Oil Great Britain	401	87,803
Inco*	338	77,343
Isuzu Motors*	134	72,251
Massey-Ferguson*	327	68,012
John Brown*	491	65,272
Unión Explosives Río Tinto*	362	64,320
ENI*	3	50,119
Montedison*	56	47,218
Esso Nederland	254	45,585
Nippon Kokan	72	44,505
Sumitomo Metal Industries	90	41,783
Peugeot*	37	38,999
Mobil Oil (Britain)*	303	37,436
Kobe Steel	76	37,170
Mobil Oil Italiana*	366	32,752
Ube Industries	201	32,187
Saarbergwerke*	206	28,777
Charbonnages de France*	295	24,326
Grupo Industrial Alfa*	355	23,894
Esso Belgium	204	23,682
Sumitomo Light Metal Ind.*	499	21,097
Veba Oel	55	21,011
Gutehoffnungshütte*	104	20,915
Vallourec*	334	20,212
Mitsubishi Oil	96	19,362
Mitsui Toatsu Chemicals	249	19,247
Denki Kagaku Kogyo	446	16,051
Kawasaki Heavy Industries	145	15,319
Mitsubishi Chemical Industries*	93	14,747
Valeo	379	13,862
Northern Engineering Industries	403	13,063
Vauxhall Motors*	286	12,554
Zambia Industrial & Mining*	218	12,103
Johnson Matthey	245	8,054
Sulzer Brothers*	276	7,654
Nihon Cement	459	7,032
Noranda*	194	3,437
Stelco*	266	2,533
Thomson*	61	2,402

* Also lost money in 1983.

ARRIVALS & DEPARTURES

NEWCOMERS AND RETURNEES*	1984 sales rank
Alcoa of Australia	447
Alps Electric	386
Austria Tabakwerke	476
Bharat Heavy Electricals (1977: 452)	395
Casio Computer	480
Commodore International	380
Daikin	495
Doosan Group	413
Dow Chemical Europe	127
General Sekiyu	182
Hattori Seiko	255
Hillsdown Holdings	372
Hoesch	199
Indústrias Votorantim (1982: 393)	432
Ivaco	478
Kanegafuchi	496
Kyocera	435
KF Industri	421
MIM Holdings (1981: 493)	490
Merck (1976: 374)	437
Minolta Camera	486
Mitsubishi Mining & Cement (1982: 319)	371
Nan Ya Plastics	474
Nippon Oil	20
Nippon Reizo Kabushiki	375
Nippon Sheet Glass	498
Nisshinbo	477
Omron Tateisi Electronics	460
Pioneer Concrete Services	227
Premier Group	278
Shin-Etsu Chemical	357
Sumitomo Light Metal Industries (1981: 488)	499
Syntex (1982: 489)	482
Valores Industriales (1982: 465)	487

DEPARTURES	1983 sales rank
ARBED Saarstahl	494
Albright & Wilson	478
Guinness (Arthur)	452
Axel Springer	446
Butano	469
Borthwick (Thomas) & Sons	474
BPB Industries	492
Clark (C. & J.)	485
COSIPA	491
DRG	479
Delta Group	493
English China Clays	496
Eschweiler Bergwerks-Verein	495
Formosa Plastics Group	202
ICL[1]	345
ISAB (Industria Siliciana Asfalti Bitumi)	459
KUKJE	236
KemaNobel[2]	496
MTU	445
Merlin Gerin	483
Niigata Engineering	471
Petroliber (Cia. Ibérica Refinadora de Petróleos)	477
Reemtsma Cigarettenfabriken	456
SAGEM	457
SEITA	490
SWEDYARDS (Svenska Varv)	365
Schindler Holding	466
Schneider	220
Scottish & Newcastle Breweries	497
Steyr-Daimler-Puch	473
Toyo Tire & Rubber	488
United Breweries	484
Vickers	430
Whitbread	352

[1] Acquired by Standard Telephones & Cables (No. 190) on September 10, 1984.

[2] Acquired by Bofors to form Nobel Industries on September 3, 1984.

* Figures in parentheses indicate year and sales rank the last time the company was listed.

THE 500 BY COUNTRY

Rank breakdown:	0-100	101-200	201-300	301-400	401-500	Total	Largest company	$000	Rank
Argentina	1	0	0	0	0	1	YPF (Yacimientos Petrolíferos)	6,880,152	60
Australia	1	0	4	1	4	10	Broken Hill Proprietary	4,884,874	91
Austria	0	2	1	0	1	4	VÖEST-Alpine	3,780,385	130
Bahamas	0	0	0	1	0	1	Commodore International	1,267,165	380
Belgium	1	2	1	1	0	5	Petrofina	8,653,072	45
Brazil	1	0	1	0	5	7	Petrobrás (Petróleo Brasileiro)	17,087,298	14
Britain	13	20	23	13	6	75	British Petroleum	50,662,063	2
Britain/Netherlands	1	0	0	0	0	1	Unilever	21,598,790	6
Canada	7	8	7	9	4	35	General Motors of Canada	12,583,753	29
Chile	0	0	0	2	0	2	CODELCO-CHILE	1,534,653	328
Colombia	0	0	1	0	0	1	Empresa Colombiana de Petróleos	1,906,654	262
Finland	1	0	0	2	4	7	Neste	5,363,922	80
France	9	7	6	10	2	34	Elf-Aquitaine	20,662,330	7
Germany	15	13	8	4	15	55	Siemens	16,638,012	15
Greece	0	0	0	0	1	1	Motor Oil (Hellas) Corinth	1,114,405	420
India	1	2	0	1	0	4	Indian Oil	8,835,981	44
Ireland	0	0	0	0	1	1	Jefferson Smurfit Group	886,516	493
Israel	0	1	0	0	0	1	Koor Industries	2,377,938	196
Italy	4	3	0	2	3	12	ENI	25,798,221	3
Japan	26	23	33	37	31	150	Toyota Motor	24,110,656	4
Kuwait	1	0	0	0	0	1	Kuwait Petroleum	14,996,649	19
Luxembourg	0	0	0	0	1	1	ARBED	982,000	458
Mexico	1	0	0	1	1	3	Pemex (Petróleos Mexicanos)	19,404,780	9
Netherlands Antilles	1	1	0	0	0	2	Schlumberger	5,978,552	71
Netherlands	3	0	2	2	2	9	Philips' Gloeilampenfabrieken	17,834,690	12
Netherlands/Britain	1	0	0	0	0	1	Royal Dutch/Shell Group	84,864,598	1
New Zealand	0	0	1	0	0	1	Fletcher Challenge	2,115,899	237
Norway	0	2	0	0	1	3	Statoil	4,384,255	106
Pakistan	0	0	0	0	1	1	Pakistan State Oil	912,398	484
Panama	0	0	0	0	1	1	Syntex	916,461	482
Peru	0	0	0	1	0	1	PETROPERU	1,309,971	374
Philippines	0	0	0	1	0	1	Philippine National Oil	1,240,442	386
Portugal	0	0	1	0	0	1	PETROGAL (Petróleos de Portugal)	2,160,505	233
South Africa	1	0	3	3	2	9	Barlow Rand	7,379,166	52
South Korea	5	2	2	0	1	10	Samsung Group	10,318,075	38
Spain	0	2	1	2	4	9	ENPETROL	4,305,366	111
Sweden	1	4	1	6	6	18	Volvo	10,517,740	36
Switzerland	3	5	3	1	0	12	Nestlé	13,241,814	28
Taiwan	1	0	0	0	2	3	Chinese Petroleum	5,943,493	73
Turkey	0	3	0	0	0	3	Türkiye Petrolleri	4,179,851	116
Venezuela	1	0	0	0	0	1	Petróleos de Venezuela	13,597,752	24
Zaire	0	0	0	0	1	1	GECAMINES	971,000	464
Zambia	0	0	1	0	0	1	Zambia Industrial & Mining	2,272,056	218

TOTAL RETURN TO INVESTORS, YEAR ENDED MAY 31, 1985, IN U.S. DOLLARS

THE TEN HIGHEST	Sales rank	
Sacilor	110	270.29%
Prouvost	467	214.78
Fletcher Challenge	237	213.23
Avions Marcel Dassault-Breguet	277	188.10
BOC Group	174	162.43
Nippon Gakki	298	145.24
Abitibi-Price	301	121.69
Asahi Chemical Industry	124	96.12
Sankyo	333	91.57
Fiat	25	89.65
THE FIVE LOWEST		
Johnson Matthey	245	-67.35%
Federale Volksbeleggings Beperk	340	-63.14
Nokia	320	-59.97
Standard Telephones & Cables	190	-47.72
Lesieur	431	-47.42
THE INDUSTRY MEDIANS		
Tobacco		45.89%
Textiles		31.42
Building materials		29.58
Rubber products		28.70
Pharmaceuticals		26.46
Publishing, printing		26.27
Beverages		24.49
Chemicals		22.77
Food		15.24
Metal products		12.95
Motor vehicles and parts		12.32
Office equipment, computers		7.16
Industrial and farm equipment		3.27
Petroleum refining		-2.48
Metal manufacturing		-2.94
Paper and wood products		-4.66
Electronics, appliances		-6.68
Mining		-10.83
Shipbuilding, transportation equipment		N.A.
Measuring and scientific equipment		N.A.
Aerospace		N.A.
Soaps, cosmetics		N.A.
Apparel		N.A.
All Industries		*9.69*
COUNTRY MEDIANS		
France		25.21%
Britain		24.94
Canada		19.14
Germany		12.40
Japan		8.80
Australia		8.09
Switzerland		2.57
Belgium		-2.41
Sweden		-3.61
Finland		-27.57
South Africa		-29.33

TOTAL RETURN TO INVESTORS, YEAR ENDED MAY 31, 1985, IN LOCAL CURRENCIES

THE TEN HIGHEST	Sales rank	
Fletcher Challenge	237	344.53%
Sacilor	110	312.00
Prouvost	467	250.23
Avions Marcel Dassault-Breguet	277	220.55
BOC Group	174	182.61
Nippon Gakki	298	166.09
Abitibi-Price	301	135.29
Fiat	25	119.18
Asahi Chemical Industry	124	112.79
Sankyo	333	107.85
THE FIVE LOWEST		
Johnson Matthey	245	-64.84%
Nokia	320	-56.16
Standard Telephones & Cables	190	-43.70
Federale Volksbeleggings Beperk	340	-43.00
Moore	246	-42.84
THE INDUSTRY MEDIANS		
Tobacco		54.84%
Rubber products		51.23
Textiles		42.60
Publishing, printing		40.49
Building materials		39.54
Chemicals		39.23
Pharmaceuticals		36.72
Beverages		34.57
Food		24.95
Metal products		24.92
Motor vehicles and parts		21.87
Office equipment, computers		20.38
Mining		20.33
Industrial and farm equipment		12.28
Paper and wood products		6.36
Metal manufacturing		5.39
Petroleum refining		4.64
Electronics, appliances		1.25
Shipbuilding, transportation equipment		N.A.
Measuring and scientific equipment		N.A.
Aerospace		N.A.
Soaps, cosmetics		N.A.
Apparel		N.A.
All Industries		*20.83*
COUNTRY MEDIANS		
Australia		45.31%
France		39.31
Britain		36.71
Canada		28.62
Germany		25.71
Japan		18.04
Switzerland		16.82
South Africa		9.26
Belgium		6.38
Sweden		5.39
Finland		-28.04

AVERAGE ANNUAL TOTAL RETURN TO INVESTORS, MAY '80-MAY '85, IN U.S. DOLLARS

THE TEN HIGHEST	Sales rank	
Sumitomo Metal Mining	329	844.04%
Glaxo Holdings	282	733.35
Kuraray	382	675.26
BOC Group	174	608.02
Hanson Trust	153	548.64
Asahi Chemical Industry	124	501.76
Chrysler Canada	92	486.67
News Corp.	292	387.94
Volvo	36	375.46
Imasco	279	359.95
THE FIVE LOWEST		
Dome Petroleum	263	-81.40%
Usinor	105	-77.37
Fuji Kosan	351	-65.14
Oerlikon-Bührle	240	-64.90
CSR	208	-61.13
THE INDUSTRY MEDIANS		
Tobacco		160.25%
Publishing, printing		143.14
Textiles		136.46
Pharmaceuticals		120.99
Office equipment, computers		96.86
Electronics, appliances		90.79
Beverages		85.79
Food		78.39
Paper and wood products		76.49
Motor vehicles and parts		61.42
Chemicals		56.80
Building materials		32.34
Industrial and farm equipment		18.55
Rubber products		15.73
Metal products		8.14
Metal manufacturing		8.12
Petroleum refining		-7.74
Mining		-37.98
Shipbuilding, transportation equipment		N.A.
Measuring and scientific equipment		N.A.
Aerospace		N.A.
Soaps, cosmetics		N.A.
Apparel		N.A.
All Industries		*53.02*
COUNTRY MEDIANS		
Sweden		98.47%
Japan		75.13
Britain		64.77
South Africa		45.01
Canada		28.85
Germany		6.80
Australia		6.79
Belgium		-3.06
Switzerland		-7.83
France		-10.97

AVERAGE ANNUAL TOTAL RETURN TO INVESTORS, MAY '80-MAY '85, IN LOCAL CURRENCIES

THE TEN HIGHEST

	Sales rank	
Glaxo Holdings	282	1415.22%
BOC Group	174	1187.37
Hanson Trust	153	1079.39
Sumitomo Metal Mining	329	962.35
Fiat	25	940.69
Volvo	36	895.78
Hachette	381	798.35
Kuraray	382	772.41
ASEA	107	771.12
News Corp.	292	737.52

THE FIVE LOWEST

Dome Petroleum	263	-77.98%
Fuji Kosan	351	-60.77
Usinor	105	-49.02
Oerlikon-Bührle	240	-45.71
Mitsui Mining	326	-34.92

THE INDUSTRY MEDIANS

Tobacco	346.69%
Publishing, printing	314.03
Office equipment, computers	244.55
Beverages	212.12
Pharmaceuticals	187.27
Textiles	166.81
Food	134.74
Chemicals	128.80
Electronics, appliances	125.77
Building materials	125.45
Paper and wood products	103.65
Motor vehicles and parts	94.44
Metal products	91.98
Petroleum refining	46.11
Industrial and farm equipment	43.89
Mining	39.17
Rubber products	30.23
Metal manufacturing	29.92
Shipbuilding, transportation equipment	N.A.
Measuring and scientific equipment	N.A.
Aerospace	N.A.
Soaps, cosmetics	N.A.
Apparel	N.A.
All Industries	*106.64*

COUNTRY MEDIANS

Sweden	315.66%
Britain	199.60
Belgium	108.72
France	100.56
Japan	97.07
Germany	83.38
Australia	83.29
South Africa	58.29
Canada	52.56
Switzerland	42.58

NOTES TO THE INTERNATIONAL 500

SALES

All companies on the list must have derived more than 50% of their sales from manufacturing and/or mining. Sales do not include excise taxes or customs duties levied according to either volume or value sales, and so the figures for some companies—most of which sell gasoline, liquor, or tobacco—may be lower than those published by the companies themselves. Unless otherwise noted, figures exclude intracompany transactions and include consolidated subsidiaries more than 50% owned, either fully or on a prorated basis. Figures have been converted to dollars using an exchange rate that consists of the official average rate during each company's fiscal year (ended December 31, 1984, unless otherwise noted).

ASSETS

Totals shown at each company's year-end. Figures have been converted to dollars at the official exchange rate at each company's year-end.

NET INCOME

Net income is shown after taxes, minority interests, and extraordinary items. Figures have been converted to dollars using an exchange rate that consists of the official average rate during each company's fiscal year (ended December 31, 1984, unless otherwise noted).

STOCKHOLDERS' EQUITY

Stockholders' equity is shown at each company's year-end. Minority interest is not included. Figures have been converted to dollars at the official exchange rate at each company's year-end.

EMPLOYEES

The figure shown is either a year-end or yearly average number as published.

TOTAL RETURN TO INVESTORS

Total return to investors includes both price appreciation and dividend yield to an investor in the company's stock. The figures shown assume sales at the end of May 1985 of stock owned at the end of May 1980 or 1984. Any proceeds from cash dividends, the sale of rights and warrant offerings, and stock received in spinoffs are assumed to have been reinvested on the date they were received. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur; however, no effort has been made to reflect the cost of brokerage commissions or of taxes. For all companies, share prices used are those quoted on local exchanges. Results are not listed if shares are not publicly traded or are traded on only a limited basis. If a company has more than one class of shares outstanding, only the more widely held and actively traded have been considered.

Total return percentages shown are the returns received by a hypothetical investor as described above. The five-year figures are annual averages, compounded.

The figures were provided by Interactive Data Corp.'s Securities Products Division.

INDUSTRY CODE

Industry code numbers used in the directory indicate which industry represents the greatest volume of industrial sales for each company. The numbers refer to the industry groups below, which are based on categories established by the U.S. Office of Management and Budget and issued by the Federal Statistical Policy and Standards Office. They are the same industry groups as those shown in the tables beginning on page 204. The median figures in the tables refer only to results of companies in the 500. No attempt has been made to calculate medians in groups or countries with fewer than four companies.

Mining	10
Food	20
Tobacco	21
Textiles, vinyl flooring	22
Apparel	23
Furniture	25
Paper, fiber, and wood products	26
Publishing, printing	27
Chemicals	28
Petroleum refining	29
Rubber, plastic products	30
Leather	31
Building materials	32
Metal manufacturing	33
Metal products	34
Electronics, appliances	36
Shipbuilding, railroad, and transportation equipment	37
Measuring, scientific, photographic equipment	38
Motor vehicles and parts	40
Aerospace	41
Pharmaceuticals	42
Soaps, cosmetics	43
Office equipment, computers	44
Industrial and farm equipment	45
Jewelry, silverware	46
Musical instruments, toys, sporting goods	47
Beverages	49

Most of the figures in this FORTUNE International 500 Directory were prepared by Barbara C. Loos and Dennis J. Moulton. The Total Return to Investors figures were provided by Interactive Data Corp.'s Securities Products Division.

ALPHABETICAL INDEX TO THE INTERNATIONAL 500

COMPANY	RANK
A	
AECI	352
AEG-Telefunken	126
ALUSUISSE (Swiss Aluminium)	138
ARBED	458
ASEA	107
Abitibi-Price	301
Adam Opel	101
Aérospatiale	180
Aisin Seiki	311
Ajinomoto	244
Akzo Group	83
Alcan Aluminium	77
Alcoa of Australia	447
Alfa-Laval	428
Allied-Lyons	141
Alps Electric	386
Amatil	422
Anomina Petroli Italiana	481
Arla	423
Asahi Chemical Industry	124
Asahi Glass	169
Atlas Copco	424
Australian Consolidated Ind.	258
Austria Tabakwerke	476
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BASF	22
BAT Industries	26
BICC	183
BL	100
BMW (Bayerische Motoren Werke)	97
BOC Group	174
BSN	165
BTR	98
Babcock International	330
Barlow Rand	52
Bass	212
Bayer	18
Beecham Group	177
Béghin-Say	383
Bertelsmann	202
Bharat Heavy Electricals	395
Blue Circle Industries	300
Boehringer Ingelheim	342
Bosch (Robert)	64
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Bridgestone	150
British Aerospace	156
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British Shipbuilders	368
British Steel	88
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Broken Hill Proprietary	91
Brooke Bond Group	288
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Burmah Oil	217
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CEPSA (Cia. Española de Petróleos)	137
CGE (Cie. Générale d'Électricité)	46
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Canada Development Corp.	159
Canada Packers	197
Canadian General Electric	425
Canadian Pacific	34
Canon	143
Casio Computer	480
Charbonnages de France	295
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Chemische Werke Hüls	259
Chevron Oil Italiana	473
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Chinese Petroleum	73
Chiyoda Chemical Eng. & Const.	363
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Empresa Nacional del Petróleo	349
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Esso Italiana	155
Esso Nederland	254
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FAG Kugelfischer Georg Schäfer	462
Federale Volksbeleggings Beperk	340
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Fletcher Challenge	237
Flick Group	131
Ford Brasil	412
Ford España	414
Ford Motor (Britain)	87
Ford Motor of Canada	42
Ford-Werke (Germany)	102
Française des Pétroles	11
Freudenberg	441
Fuji Electric	251
Fuji Heavy Industries	203
Fuji Kosan	351
Fuji Photo Film	184
Fujisawa Pharmaceutical	485
Fujitsu	84
Furukawa Electric	207
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GECAMINES	464
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General Motors do Brasil	444
General Sekiyu	182
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George Weston Holdings	117
Glaxo Holdings	282
Grand Metropolitan	69
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Grupo Industrial Alfa	355
Guest Keen & Nettlefolds	178
Gulf Canada	118
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Imperial Group	132
Imperial Oil	63
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International Thomson Organisation	215
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Itoham Foods	394
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Jacobs Suchard	230
Jefferson Smurfit Group	493
John Brown	491
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KF Industri	421
KHD (Klöckner-Humboldt-Deutz)	296
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Kanegafuchi	496
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Kawasaki Heavy Industries	145
Kawasaki Steel	99
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Klöckner-Werke	309
Koa Oil	236
Kobe Steel	76
Koç Holding	175
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Mitsubishi Electric	53
Mitsubishi Gas Chemical	398
Mitsubishi Heavy Industries	23
Mitsubishi Metal	256
Mitsubishi Mining & Cement	371
Mitsubishi Oil	96
Mitsubishi Petrochemical	260
Mitsubishi Rayon	369
Mitsui Engineering & Shipbldg.	367
Mitsui Mining	326
Mitsui Mining & Smelting	370
Mitsui Petrochemical	365
Mitsui Toatsu Chemicals	249
Mobil Oil (Britain)	303
Mobil Oil (Germany)	151
Mobil Oil Française	307
Mobil Oil Italiana	366
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Moore	246
Morinaga Milk Industry	384
Motor Oil (Hellas) Corinth	420
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Nan Ya Plastics	474
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Neste	80
Nestlé	28
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Nichiro Gyogyo	404
Nihon Cement	459
Nippon Gakki	298
Nippon Kokan	72
Nippon Light Metal	287
Nippon Meat Packers	314
Nippon Mining	78
Nippon Oil	20
Nippon Reizo Kabushiki	375
Nippon Seiko	449
Nippon Sheet Glass	498
Nippon Steel	31
Nippon Suisan	226
Nippondenso	147
Nissan Diesel Motor	448
Nissan Motor	13
Nissan Shatai	241
Nisshin Flour Milling	318
Nisshin Steel	306
Nisshinbo	477
Nixdorf Computer	408
Nokia	320
Noranda	194
Norddeutsche Affinerie	500
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Northern Engineering Industries	403
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ÖMV (Österreichische Mineralölverwaltung)	181
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Omron Tateisi Electronics	460
Onoda Cement	356
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PETROGAL (Petróleos de Portugal)	233
PETRONOR (Petróleos del Norte)	396
PETROPERU	374
PWA	440
Pakistan State Oil	484
Pearson	415
Pechiney	120
Pemex (Petróleos Mexicanos)	9
Petro-Canada	135
Petrobrás (Petróleo Brasileiro)	14
Petrofina	45
Petróleos de Venezuela	24
Peugeot	37
Philippine National Oil	388
Philips' Gloeilampenfabrieken	12
Pilkington Brothers	269
Pioneer Concrete Services	227
Pioneer Electronic	358
Pirelli	142
Plessey	271
Pohang Iron & Steel	209
Porsche	479
Premier Group	278
Preussag	94
Prima Meat Packers	494
Prouvost	467
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RMC Group	312
Racal Electronics	391
Rank Xerox	210
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Rauma-Repola	389
Reckitt & Colman	332
Redland	360
Reed International	167
Renault	30
Rengo	471
Rheinische Braunkohlenwerke	418
Rhône-Poulenc	74
Ricoh	250
Rio Tinto-Zinc	47
Roche / Sapac	140
Rolls-Royce	265
Rothmans International	148
Rowntree Mackintosh	325
Royal Dutch / Shell Group	1
Royal Pkg. Industries Van Leer	470
Ruhrkohle	49
Rütgerswerke	410
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SEAT	427
SKF	229
SNECMA	305
SNIA BPD	397
SSAB (Svenskt Stål)	343
Saab-Scania	164
Saarbergwerke	206
Sabanci (Haci Ömer) Holding	168
Sacilor	110
Saint-Gobain	58
Salzgitter	146
Samsung Group	38
Sandoz	161
Sandvik Group	359
Sankyo	333
Sanyo Electric	70
Sanyo-Kokusaku Pulp	293
Sasol	268
Schering	289
Schlumberger	71
Seagram	270
Sekisui Chemical	308
Sharp	115
Shin-Etsu Chemical	357
Shionogi	463
Shiseido	323
Showa Denko	261
Showa Oil	121
Showa Sangyo	455
Siderúrgica Nacional	489
Siemens	15
Snow Brand Milk Products	154
Solvay	125
Sony	81
Ssangyong Cement Industrial	139
Standard Elektrik Lorenz	315
Standard Telephones & Cables	190
Statoil	106
Statsföretag Group	348
Steel Authority of India	171
Stelco	266
Stora Kopparbergs Bergslags	451
Sulzer Brothers	276
Sumitomo Chemical	144
Sumitomo Electric Industries	200
Sumitomo Heavy Industries	350
Sumitomo Light Metal Industries	499
Sumitomo Metal Industries	90
Sumitomo Metal Mining	329
Sumitomo Rubber	461
Suncor	406
Sunkyong	62
Suzuki Motor	189
Svenska Cellulosa	353
Swedish Match	400
Syntex	482
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TBG	162
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TI Group	377
Tabacalera	299
Taiyo Fishery	112
Takeda Chemical	222
Tarmac	281
Teijin	205
Texaco (Britain)	133
Texaco Canada	95
Thomson	61
Thorn EMI	113
Thyssen	32
Toa Nenryo Kogyo	82
Tokyo Sanyo Electric	252
Toppan Printing	187
Toray Industries	160
Toshiba	35
Toyo Seikan	225
Toyo Soda Manufacturing	434
Toyobo	231
Toyoda Automatic Loom Works	433
Toyota Auto Body	399
Toyota Motor	4
Türkiye Petrolleri	116
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USIMINAS	468
Ube Industries	201
Ultramar	108
Unigate	188
Unilever	6
Unión Explosivos Río Tinto	362
Union International	275
Union Laitière Normande	347
United Biscuits (Holdings)	214
Unitika	337
Usinor	105
V	
VIAG	239
VÖEST-Alpine	130
Vaal Reefs Exploration & Mining	443
Vale do Rio Doce	294
Valeo	379
Vallourec	334
Valmet	452
Valores Industriales	487
Vauxhall Motors	286
Veba Oel	55
Volkswagenwerk	16
Volvo	36
W	
Wärtsilä	442
Wellcome Foundation	409
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YPF (Yacimientos Petrolíferos)	60
Yamaha Motor	253
Yamazaki Baking	344
Yokohama Rubber	402
Yoshida Kogyo	411
Z	
Zahnradfabrik Friedrichshafen	426
Zambia Industrial & Mining	218
Zanussi Group	450
Zeiss-(Carl)-Stiftung	475

THE LARGEST COMMERCIAL BANKS OUTSIDE THE U.S.

Another year, another advance in Japanese dominance. Japanese banks now occupy the top five slots and 21 of the top 50. West Germany, France, and Britain are far behind.

IN THE FORTUNE directory of the largest commercial banks outside the U.S., the aggressive Japanese have gradually taken over the heights. When FORTUNE published its first such directory in 1969, the largest Japanese bank ranked 12th. This year the Japanese swept the top five places. Japan has 29 banks on the list and 21 among the top 50 (up from 18 last year). No other country comes close. West Germany, the runner-up, has 11 banks on the list, with five among the top 50.

At the summit, for the second year in a row, stands Dai-Ichi Kangyo Bank, headquartered in Tokyo. With $125 billion in assets, Dai-Ichi Kangyo is now the second-largest bank in the world, topped only by that American overachiever Citicorp.

Since asset figures for all the banks in the directory are expressed in dollars, currency relationships inescapably affect positions. The rankings of Japanese banks got help from the buoyancy of the yen, which held up fairly well against the strong dollar. European banks, in contrast, were pulled down by relative weakness in national currencies. Banque Nationale de Paris, which stood at the very top of the list for 1980, 1981, and 1982, slipped from fifth to sixth this time, bumped by Japan's Sanwa Bank. All the British banks increased their assets in pounds but nevertheless moved down in the rankings, with the pound falling against the dollar. Every German bank slipped at least three notches, and again that reflects the mark's weakness relative to the dollar rather than weakness in the performance of the banks. Westdeutsche Landesbank Girozentrale, the only bank on last year's list to show a loss, reported a profit of $6.5 million this time.

The most upwardly mobile bank was a Down Under outfit, Australia & New Zealand Banking, ANZ for short. Mostly by acquiring London-based Grindlays Bank, ANZ shot from No. 80 and $20 billion in assets to No. 62 and nearly $30 billion. With that surge, ANZ leaped over its Australian rivals Commonwealth Banking and National Australia Bank.

Both newcomers to the directory are Far Eastern banks: Zenshinren Bank, No. 72, and Bank of Seoul, No. 100. Because all Korean banking institutions were entirely owned by the government, no Korean bank was eligible for the list before this year. Recently, however, five major banks were privatized in an effort to make the banking system more efficient.

The two drop-offs were Italian and Iranian. Banco di Sicilia slid off the bottom of the list—it was No. 98 last year. Bank Melli Iran, though, was No. 52 last time and therefore might have seemed a sure repeater, but the continuing turmoil in Iran made it impossible to obtain reliable figures. **—Ruth R. Moss**

RANK		BANK
'84	'83	
1	1	Dai-Ichi Kangyo Bank [7,8]
2	2	Fuji Bank [7,8]
3	3	Sumitomo Bank [7,8]
4	4	Mitsubishi Bank [7,8]
5	6	Sanwa Bank [7,8]
6	5	Banque Nationale de Paris [9]
7	8	Caisse Nationale de Crédit Agricole [9]
8	9	Crédit Lyonnais [9]
9	11	Société Générale [9]
10	7	Barclays Bank
11	12	Bank of Tokyo [10]
12	17	Norinchukin Bank [7,10]
13	15	Industrial Bank of Japan [7,8]
14	10	National Westminster Bank
15	19	Tokai Bank [7,8]
16	16	Mitsui Bank [7,8]
17	13	Deutsche Bank [11]
18	14	Midland Bank
19	20	Long-Term Credit Bank of Japan [7,8]
20	18	Royal Bank of Canada [12]
21	24	Mitsubishi Trust & Banking [7,8]
22	22	Hongkong & Shanghai Banking
23	25	Taiyo Kobe Bank [7,8]
24	28	Sumitomo Trust & Banking [7,8]
25	32	Bank of Montreal [12]
26	21	Cie Financière de Paris et des Pays-Bas [9]
27	23	Dresdner Bank [11]
28	31	Mitsui Trust & Banking [7,8]
29	34	Daiwa Bank [7,8]
30	27	Canadian Imperial Bank of Commerce [12]
31	26	Lloyds Bank
32	30	Union Bank of Switzerland [7]
33	29	Banco do Brasil [9]
34	42	Yasuda Trust & Banking [7,8]
35	37	Banca Nazionale del Lavoro [9]
36	35	Swiss Bank Corp. [7]
37	36	Bank of Nova Scotia [12]
38	33	Westdeutsche Landesbank Girozentrale [9,11]
39	45	Nippon Credit Bank [7,8]
40	38	Algemene Bank Nederland
41	39	Standard Chartered Bank
42	44	Banca Commerciale Italiana[9]
43	40	Bayerische Vereinsbank [11]
44	41	Commerzbank [11]
45	51	Kyowa Bank [7,8]
46	53	Shoko Chukin Bank [9,10]
47	46	Rabobank
48	50	Toronto-Dominion Bank [12]
49	54	Saitama Bank [7,8]
50	43	Amsterdam-Rotterdam Bank

[1] Asset figures have been converted into U.S. dollars using the market rate prevailing at each bank's fiscal year-end, which is December 31, 1984, unless otherwise noted. Chuo Trust & Banking, Daiwa Bank, Mitsubishi Trust & Banking, Mitsui Trust & Banking, Sumitomo Trust & Banking, Toyo Trust & Banking, Yasuda Trust & Banking, and Bank of Seoul include holdings of major trusts in their assets.

THE 100 LARGEST COMMERCIAL BANKING COMPANIES RANKED BY ASSETS

COUNTRY	ASSETS[1]	INCREASE (DECREASE)		DEPOSITS[2]		LOANS[3]	NET INCOME[4]	STOCKHOLDERS' EQUITY[5]	OFFICES[6]	EMPLOYEES
		IN U.S. DOLLARS	IN LOCAL CURRENCIES							
	$000	PERCENT	PERCENT	$000	RANK	$000	$000	$000		
Japan	125,464,192	7.57	12.70	93,641,981	1	68,230,624	257,657	2,073,601	358	21,986
Japan	115,845,047	6.77	11.87	87,381,644	2	60,922,738	287,927	2,355,188	277	16,420
Japan	114,942,390	8.88	14.08	85,311,948	4	59,973,443	320,166	2,412,831	248	15,136
Japan	111,031,721	9.42	14.64	81,927,027	6	59,936,590	268,847	2,119,980	224	15,834
Japan	102,419,627	7.31	12.44	79,167,740	7	56,919,797	251,319	1,868,882	268	16,158
France	98,375,893	(2.76)	12.61	83,314,585	5	79,555,384	186,868	1,383,692	2,614	60,014
France	91,855,084	1.67	17.74	85,354,333	3	76,447,438	121,937	2,535,613	10,703	74,154
France	89,930,239	1.90	18.00	77,976,548	8	79,526,007	116,714	1,209,747	2,664	54,795
France	86,590,427	0.13	15.96	76,263,611	9	64,615,936	106,047	952,499	2,191	44,088
Britain	85,255,434	(9.50)	13.43	73,842,186	11	75,903,426	397,999	3,011,958	5,484	125,900
Japan	83,762,171	5.94	(0.38)	55,693,032	21	42,056,761	139,281	1,335,506	295	14,605
Japan	83,677,664	20.22	13.05	73,622,590	12	44,011,987	91,174	524,881	39	3,166
Japan	83,272,645	9.15	14.36	68,558,210	13	47,297,801	188,017	1,710,126	28	5,719
Britain	82,816,686	(4.93)	19.16	75,866,370	10	72,935,472	385,979	3,067,542	3,801	90,000
Japan	77,841,960	16.45	22.00	63,668,279	16	43,357,837	165,493	1,359,656	238	14,233
Japan	75,235,958	5.03	10.05	58,069,559	18	42,943,163	146,971	1,344,800	218	11,701
Germany	73,621,646	(4.54)	10.52	66,843,698	14	59,860,479	232,420	2,319,460	1,411	47,873
Britain	71,197,314	(6.77)	16.86	64,801,680	15	61,371,684	60,101	1,951,230	5,000	80,626
Japan	69,892,993	7.43	12.56	57,536,011	19	40,582,896	120,320	1,353,507	27	3,572
Canada	66,922,211	(2.59)	3.92	59,002,544	17	44,877,755	350,981	2,845,046	1,510	38,189
Japan	62,630,644	6.61	11.70	56,342,868	20	30,669,530	70,774	789,433	57	6,592
Hong Kong	61,547,220	1.82	2.40	53,981,214	22	39,630,288	331,380	2,666,198	1,157	45,000
Japan	61,076,914	9.16	14.37	48,064,075	26	37,378,692	78,771	1,007,801	357	15,545
Japan	59,325,492	10.70	15.98	51,994,338	23	30,067,212	72,424	789,004	59	6,281
Canada	58,168,379	13.46	21.04	50,700,672	25	36,447,637	220,998	2,240,004	1,222	33,598
France	55,844,496	(7.84)	6.72	18,434,395	74	35,779,746	134,951	1,937,840	1,200	28,000
Germany	55,379,626	(6.17)	8.64	51,667,676	24	44,611,884	128,125	1,470,373	1,185	32,197
Japan	54,427,299	4.36	9.35	46,426,440	27	29,183,252	54,721	659,372	58	5,624
Japan	53,397,736	8.88	14.08	44,807,659	30	26,474,771	64,529	75,930	188	10,098
Canada	51,800,380	(6.26)	0.01	45,117,977	28	38,842,598	220,210	2,210,948	1,641	32,615
Britain	50,962,422	(8.64)	14.51	44,818,074	29	45,296,328	307,180	2,376,216	3,000	70,866
Switzerland	50,377,198	(4.66)	13.80	42,826,966	31	39,623,448	248,020	2,565,559	253	17,647
Brazil	47,430,193	(10.61)	189.26	18,159,847	75	40,492,305	987,688	3,870,541	2,269	116,656
Japan	47,045,464	14.76	20.24	40,427,938	33	22,201,499	39,490	472,653	56	5,318
Italy	47,000,556	7.24	25.37	39,878,746	35	29,904,678	93,218	2,044,344	398	25,059
Switzerland	45,761,872	(5.17)	13.19	39,696,337	36	34,050,991	213,882	2,271,263	217	14,400
Canada	44,960,879	1.11	7.87	39,913,626	34	29,081,868	211,870	1,734,070	1,196	25,527
Germany	44,847,578	(12.34)	1.50	41,688,631	32	36,229,013	6,569	1,263,889	12	7,236
Japan	42,285,172	9.07	14.27	35,016,602	41	26,484,917	72,808	851,434	22	2,027
Netherlands	41,234,280	(4.78)	10.86	37,083,871	37	22,404,934	124,889	1,098,933	960	28,381
Britain	39,905,027	(4.93)	19.17	34,249,819	42	34,066,855	98,031	1,530,644	1,847	55,588
Italy	39,679,811	0.89	17.95	35,885,407	40	28,451,363	162,957	1,074,070	551	22,735
Germany	39,353,108	(5.54)	9.36	36,986,358	38	34,078,177	65,293	697,898	468	13,024
Germany	38,886,471	(6.43)	8.33	36,667,065	39	31,979,301	91,521	971,898	882	22,801
Japan	38,347,550	12.18	17.54	30,052,689	49	23,445,452	56,102	718,716	243	10,833
Japan	37,763,524	19.67	12.53	34,048,934	43	31,375,555	23,726	939,595	90	7,138
Netherlands	35,741,670	(7.48)	7.72	33,507,090	44	25,579,198	192,605	1,794,672	3,478	29,211
Canada	35,434,841	2.80	9.67	30,927,455	48	25,526,998	261,891	1,805,748	988	17,495
Japan	35,356,339	12.71	18.09	28,526,934	50	20,630,761	61,183	659,210	195	8,589
Netherlands	35,027,704	(12.49)	1.88	32,553,054	45	18,997,201	78,567	918,599	838	23,341

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[2] Deposit figures have been converted into U.S. dollars using the market rate as of each bank's fiscal year-end. Figures for all German banks include their own bonds; so do the figures for Bank of Tokyo, Industrial Bank of Japan, Long-Term Credit Bank of Japan, and Norinchukin Bank. Banco do Brasil includes funds for refinancing.

[3] Loan figures have been converted to U.S. dollars using the market rate prevailing at each bank's fiscal year-end. Figures include loans to banks and money at call or available on short notice.

[4] Net income figures have been converted into U.S. dollars using the average rate in the official exchange market during the bank's fiscal year. Net income is after taxes and excludes minority interest.

[5] Stockholders' equity figures have been converted into U.S. dollars using the market rate prevailing at each bank's fiscal year-end. Equity is the sum of capital stock, surplus, and retained earnings. Figures for all French banks are before appropriation of profits.

[6] Includes head office, branches, and agencies.

[7] Parent company only.

[8] Figures are for fiscal year ended September 30, 1984.

[9] Government owned.

[10] Figures are for fiscal year ended March 31, 1984.

[11] Excludes some subsidiaries more than 50% owned.

[12] Figures are for fiscal year ended October 31, 1984.

THE 100 LARGEST COMMERCIAL BANKING COMPANIES

RANK		BANK	COUNTRY	ASSETS[1]	INCREASE (DECREASE)		DEPOSITS[2]	
					IN U.S. DOLLARS	IN LOCAL CURRENCIES		
'84	'83			$000	PERCENT	PERCENT	$000	RANK
51	55	**Toyo Trust & Banking** [7,8]	Japan	34,554,107	10.45	15.73	31,478,202	46
52	60	**Istituto Bancario San Paulo di Torino** [9]	Italy	34,235,829	12.62	31.66	27,008,057	54
53	57	**Westpac Banking** [8]	Australia	33,515,100	8.21	17.09	23,112,256	62
54	48	**Bayerische Hypotheken- und Wechsel-Bank** [11]	Germany	33,324,041	(6.52)	8.23	31,165,874	47
55	47	**Bayerische Landesbank Girozentrale** [7]	Germany	33,225,002	(9.88)	4.34	27,081,265	53
56	49	**Credit Suisse** [7]	Switzerland	32,306,112	(8.90)	8.75	27,571,589	51
57	65	**Hokkaido Takushoku Bank** [7,8]	Japan	31,175,034	10.83	16.12	23,024,966	63
58	63	**Credito Italiano** [9]	Italy	30,402,616	3.98	21.56	27,374,972	52
59	66	**Monte dei Paschi di Siena** [9,11]	Italy	30,271,193	9.96	28.55	25,204,096	58
60	59	**State Bank of India** [9]	India	29,911,169	(1.65)	16.07	20,321,331	67
61	56	**Cassa di Risparmio delle Provincie Lombarde**	Italy	29,763,022	(4.83)	11.26	23,767,831	61
62	80	**Australia & New Zealand Banking** [8]	Australia	29,723,531	45.79	57.77	18,495,317	73
63	72	**Rafidain Bank** [9]	Iraq	28,967,459	29.52	29.52	27,003,600	55
64	68	**Banco di Roma** [9]	Italy	28,952,420	6.81	24.87	25,444,893	57
65	58	**Norddeutsche Landesbank Girozentrale** [9,11]	Germany	27,948,950	(8.94)	5.43	25,632,871	56
66	61	**Crédit Industriel et Commercial** [9]	France	27,735,738	(5.70)	9.21	22,961,143	64
67	69	**Bank of Yokohama** [7,8]	Japan	27,524,156	9.65	14.89	22,437,100	65
68	67	**Cie Financière de Suez** [9]	France	27,310,645	0.65	16.55	17,584,046	78
69	62	**Société Générale de Banque**	Belgium	27,030,223	(7.56)	4.91	25,156,223	59
70	64	**Deutsche Genossenschaftsbank** [11]	Germany	26,383,657	(7.43)	7.18	23,988,327	60
71	71	**Commonwealth Banking** [9,13]	Australia	26,272,970	14.56	16.40	19,831,556	68
72	●	**Zenshinren Bank**[7,10]	Japan	23,579,604	N.A.	N.A.	21,978,469	66
73	77	**National Australia Bank** [8,9]	Australia	22,801,358	9.16	18.13	13,944,503	90
74	73	**Banco di Napoli** [7,5]	Italy	22,320,363	2.86	20.26	18,670,922	72
75	70	**Hessische Landesbank-Girozentrale-** [11]	Germany	21,734,106	(9.79)	4.44	17,929,975	76
76	74	**Banque Bruxelles Lambert** [8]	Belgium	21,107,782	(2.54)	13.56	18,968,154	69
77	85	**Chuo Trust & Banking** [7,8]	Japan	20,801,486	16.18	21.73	18,851,786	70
78	76	**Bank Leumi le-Israel** [11]	Israel	20,633,317	(3.23)	470.68	17,242,046	79
79	81	**Skandinaviska Enskilda Banken**	Sweden	20,266,778	(0.30)	11.84	16,358,375	81
80	79	**Groupe des Banques Populaires**	France	20,166,693	(1.14)	14.49	17,046,465	80
81	75	**Bank für Gemeinwirtschaft** [11]	Germany	19,874,634	(7.76)	6.79	18,786,118	71
82	82	**Bank Hapoalim**	Israel	19,182,245	(1.10)	483.24	13,621,659	91
83	78	**Nederlandsche Middenstandsbank**	Netherlands	19,171,407	(7.30)	7.93	17,888,327	77
84	91	**Banque Française du Commerce Extérieur** [9]	France	18,394,270	11.77	29.44	9,647,374	99
85	83	**Creditanstalt-Bankverein** [9,15]	Austria	17,963,982	(5.79)	8.74	16,103,932	82
86	84	**Crédit Communal de Belgique** [15]	Belgium	17,849,801	(2.72)	10.41	15,865,315	83
87	86	**Svenska Handelsbanken**	Sweden	17,507,958	(0.85)	11.22	12,947,691	96
88	90	**Hokuriku Bank** [7,8]	Japan	17,108,838	3.47	8.41	14,601,300	86
89	92	**Crédit Commercial de France** [9]	France	16,658,046	3.61	19.98	14,165,602	88
90	96	**Banco Central** [7]	Spain	16,526,930	10.03	21.75	11,083,682	98
91	89	**Royal Bank of Scotland** [8]	Britain	16,518,077	(0.43)	20.85	14,663,499	85
92	87	**Crédit Mutuel**	France	16,236,907	(5.53)	9.40	13,004,098	95
93	97	**National Commercial Bank of Saudi Arabia** [16]	Saudi Arabia	16,206,843	10.19	12.72	14,520,272	87
94	93	**Kredietbank** [10,11]	Belgium	16,101,122	2.60	13.00	14,753,715	84
95	95	**Post-och Kreditbanken** [9]	Sweden	16,037,116	4.15	16.83	13,490,353	93
96	88	**ASLK-CGER** [15]	Belgium	15,987,458	(4.59)	8.29	13,486,098	94
97	94	**Chiba Bank** [7,8]	Japan	15,894,362	2.88	7.79	14,138,817	89
98	99	**Joyo Bank** [7,8]	Japan	15,204,338	4.82	9.83	13,514,828	92
99	100	**Banco Español de Crédito** [7,15]	Spain	15,131,712	4.38	15.50	11,826,761	97
100	●	**Bank of Seoul**[15]	South Korea	15,055,773	5.60	9.47	5,049,568	100
		TOTALS		**4,363,507,429**			**3,598,091,550**	

● Not on last year's list.

N.A. Not available.

[13] Figures are for fiscal year ended June 30, 1984.

[14] Average for the year.

[15] Includes certain subsidiaries owned 50% or less, either fully or on a prorated basis.

[16] Figures are for fiscal year ended September 25, 1984.

LOANS[3] $000	NET INCOME[4] $000	STOCKHOLDERS' EQUITY[5] $000	OFFICES[6]	EMPLOYEES
16,362,382	36,127	398,959	59	4,840
14,241,905	246,979	1,098,160	630	17,332
21,500,317	308,134	1,409,395	1,810	41,008
28,883,046	65,624	676,559	486	11,442
26,236,974	9,339	784,786	5	4,070
23,633,857	177,500	2,015,308	180	12,204
17,627,667	40,326	471,648	196	6,979
21,923,315	94,364	1,391,865	492	18,348
20,056,911	83,930	1,852,656	735	16,013
13,714,115	22,668	317,225	10,185	257,203
18,310,379	61,053	1,387,748	533	13,494
17,892,431	109,388	1,476,344	1,642	36,789
18,623,138	717,959	N.A.	240	12,536
21,494,396	61,870	469,606	446	16,930
22,506,930	26,598	507,290	224	5,991
12,119,202	31,853	356,415	1,415	26,421
17,089,595	62,807	733,062	193	7,248
83,646,827	80,628	1,146,750	897	10,951
25,109,252	58,318	487,348	1,176	15,778
22,075,200	41,255	574,143	12	2,429
14,201,008	214,245	1,385,320	1,316	31,461
10,259,617	45,758	309,175	17	904
13,398,713	226,024	1,122,463	1,730	22,474
9,214,326	7,214	656,998	492	13,605
15,879,513	18,092	422,915	7	2,815
7,329,543	28,158	305,800	1,000	11,829
9,746,877	11,028	127,230	52	3,763
11,545,111	76,570	617,952	419	14,901
11,212,131	56,544	313,411	348	7,893[14]
15,731,365	63,587	498,524	1,823	28,800
15,555,328	50,777	640,792	277	8,576
14,962,532	74,523	538,623	362	10,156
12,054,658	33,714	435,983	504	11,530
10,388,663	6,506	133,081	30	2,966
10,690,718	15,186	455,521	321	9,290
10,793,288	16,398	307,058	1,412	2,840
9,360,490	41,683	171,753	454	6,056[14]
12,630,527	35,389	459,356	173	5,362
15,127,902	26,145	295,315	277	8,174
5,814,729	90,347	787,108	2,033	19,432
14,241,347	136,413	861,826	856	16,311[14]
7,306,967	53,582	600,838	4,000	19,000
5,634,454	142,348	900,141	173	6,154
8,063,769	35,057	350,375	759	8,800
8,390,055	21,035	208,568	131	3,945[14]
15,507,433	36,711	519,579	1,102	9,617
11,976,873	46,238	493,791	158	5,412
10,607,550	43,821	517,598	140	5,745
7,130,697	96,636	822,957	2,212	18,121
4,566,510	14,915	258,615	181	9,153
2,922,674,205	**13,071,956**	**114,316,528**		**2,356,682**

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COMPANY	RANK
ASLK-CGER	96
Algemene Bank Nederland	40
Amsterdam-Rotterdam Bank	50
Australia & New Zealand Banking	62
Banca Commerciale Italiana	42
Banca Nazionale del Lavoro	35
Banco Central	90
Banco di Napoli	74
Banco di Roma	64
Banco do Brasil	33
Banco Español de Crédito	99
Bank für Gemeinwirtschaft	81
Bank Hapoalim	82
Bank Leumi le-Israel	78
Bank of Montreal	25
Bank of Nova Scotia	37
Bank of Seoul	100
Bank of Tokyo	11
Bank of Yokohama	67
Banque Bruxelles Lambert	76
Banque Francaise du Commerce Extérieur	84
Banque Nationale de Paris	6
Barclays Bank	10
Bayerische Hypotheken- und Wechsel-Bank	54
Bayerische Landesbank Girozentrale	55
Bayerische Vereinsbank	43
Caisse Nationale de Crédit Agricole	7
Canadian Imperial Bank of Commerce	30
Cassa di Risparmio delle Provincie Lombarde	61
Chiba Bank	97
Chuo Trust & Banking	77
Cie Financière de Paris et des Pays-Bas	26
Cie Financière de Suez	68
Commerzbank	44
Commonwealth Banking	71
Crédit Commercial de France	89
Crédit Communal de Belgique	86
Crédit Industriel et Commercial	66
Crédit Lyonnais	8
Crédit Mutuel	92
Credit Suisse	56
Creditanstalt-Bankverein	85
Credito Italiano	58
Dai-Ichi Kangyo Bank	1
Daiwa Bank	29
Deutsche Bank	17
Deutsche Genossenschaftsbank	70
Dresdner Bank	27
Fuji Bank	2
Groupe des Banques Populaires	80
Hessische Landesbank-Girozentrale-	75
Hokkaido Takushoku Bank	57
Hokuriku Bank	88
Hongkong & Shanghai Banking	22
Industrial Bank of Japan	13
Istituto Bancario San Paulo di Torino	52
Joyo Bank	98
Kredietbank	94
Kyowa Bank	45
Lloyds Bank	31
Long-Term Credit Bank of Japan	19
Midland Bank	18
Mitsubishi Bank	4
Mitsubishi Trust & Banking	21
Mitsui Bank	16
Mitsui Trust & Banking	28
Monte dei Paschi di Siena	59
National Australia Bank	73
National Commercial Bank of Saudi Arabia	93
National Westminster Bank	14
Nederlandsche Middenstandsbank	83
Nippon Credit Bank	39
Norddeutsche Landesbank Girozentrale	65
Norinchukin Bank	12
Post-och Kreditbanken	95
Rabobank	47
Rafidain Bank	63
Royal Bank of Canada	20
Royal Bank of Scotland	91
Saitama Bank	49
Sanwa Bank	5
Shoko Chukin Bank	46
Skandinaviska Enskilda Banken	79
Société Générale	9
Société Générale de Banque	69
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State Bank of India	60
Sumitomo Bank	3
Sumitomo Trust & Banking	24
Svenska Handelsbanken	87
Swiss Bank Corp.	36
Taiyo Kobe Bank	23
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The figures on the 100 Largest Commercial Banking Companies Outside the U.S. were prepared by reporter Ruth R. Moss.

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SEPTEMBER 16, 1985

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FORTUNE

HIRING BY THE NUMBERS

Business vs. Reagan on Affirmative Action

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BALDWIN-UNITED BACK FROM THE DEAD

ADNAN KHASHOGGI: CASH SHORT, DREAMING BIG

THE NEW CASE FOR PROTECTIONISM

SEPTEMBER 16, 1985
VOL. 112, NO. 6

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GOOD NEWS, BAD NEWS, AND AN "INVISIBLE CEILING"

■ How are blacks faring? That depends on what statistics you look at. On the bad-news side, the median black American family has only about 55% as much income as the median white family (disregarding income in kind, such as food stamps). On the good-news side, the average black family headed by a husband under the age of 35 has about the same income as a comparable white family.

A mixture of good and bad news is discernible in the tables at the bottom of this page, showing figures compiled by the Equal Employment Opportunity Commission. The first impression you get is that white women are faring better than blacks. In 1984 black women and black men lagged behind white women in both employment categories, even allowing for the fact that in the total work force white women outnumber either black men or black women about 7 to 1.

But if you look at rate of change over time, crosscurrents are visible. From their low base in 1976, black women have progressed *faster* than white women. In the officials and managers category, black women gained relative to white women from 1976 to 1980 and again from 1980 to 1984. In the professions the trend is less distinct. Black women gained relative to white women from 1976 to 1980, but slipped somewhat in relative position from 1980 to 1984. Even so, there was some relative improvement in the position of black women over the eight-year period. In 1976 white women outnumbered black women 16 to 1 in the professions; in 1984 the ratio was 14 to 1.

Affirmative action *is needed to give blacks a fair chance, argues accountant Ramona Henderson: "The free-market system just doesn't work."*

For black men, though, the figures tell a different and disturbing story. From 1976 to 1980 and again from 1980 to 1984, black men lost ground relative to both white women and black women, in both categories of employment.

In some professions good news about blacks is hard to find. Accounting is a case in point. The American Institute of Certified Public Accountants reports that 96 major firms with thousands of partners have a total of 23 black partners. Over the past several years, according to the institute, the number of blacks hired by the major U.S. accounting firms has fallen sharply. "Accounting firms and corporations no longer recruit at small colleges in the South, where many black students are," says Ramona Henderson, president of the National Association of Black Accountants. She thinks the answer is stronger affirmative action pressure from Washington. "The free-market system," she says, "just doesn't work."

In big-time law, blacks seem to be slipping backward. An article in the March 1984 issue of the *American Lawyer* entitled "Why Blacks Still Haven't Made It" points out that 25 large law firms in New York City had a total of 2,000 associates in 1979, of whom 64, or 3.2%, were black. Five years later the same firms had ballooned to 4,000 associates, and only 94, or 2.3%, were black. That drop came during a period when the number of blacks enrolled in the top law schools was growing.

Among black executives and professionals, there is talk of an "invisible ceiling" that blacks bump up against. "The hardest thing for a black middle manager is that there are no role models higher up the ladder," says Leroy Nunery, an assistant vice president at First National Bank of Chicago and a vice president of the National Black MBA Association. As a result, Nunery says, black MBAs are more likely to change jobs than whites are. When they hit the invisible ceiling, they move elsewhere in search of a higher ceiling.

A recent study by Edward Irons, a banking and finance professor at Atlanta University, found that eight out of ten black managers in banks and other financial institutions in the U.S. believe that their chances of promotion are not as good as those of their white peers. Consequently, most black bankers would not hesitate to leave their current employers if something better came along. The job hopping may be bad for their careers. Elaine Carter, a New York management consultant who specializes in affirmative action, believes that job hopping is part of a vicious circle that works against black progress. "Despair hurts productivity," she says. "Good people give up or leave—making the company more cautious about promoting others in the future, and so those people leave, and so it goes."

With the Reagan Administration backing away from affirmative action, Carter believes, the problem of discouragement among black managers is getting worse. "Many blacks in business feel that doors they have only recently pried open could now be slammed shut again," she says. "Without a strong steering hand from government, there is a sense that things could easily slip back to the way they were before affirmative action came along."

OCCUPATIONAL CATEGORY	PERCENT OF TOTAL 1976	 1980	 1984
OFFICIALS AND MANAGERS			
White women	13.4%	16.5%	20.4%
Black women	.9%	1.2%	1.7%
Black men	2.3%	2.7%	2.7%

OCCUPATIONAL CATEGORY	PERCENT OF TOTAL 1976	 1980	 1984
PROFESSIONALS			
White women	27.5%	32.6%	36.9%
Black women	1.7%	2.4%	2.6%
Black men	1.7%	1.9%	1.9%

OCTOBER 14, 1985

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FORTUNE

THE LATEST ADVENTURES OF STEVE JOBS

MAKING IT SAFER TO FLY

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SEARS ROEBUCK'S STRUGGLING FINANCIAL EMPIRE

LAWYERS FOR COMPANIES IN DEEP TROUBLE

THE DEVELOPER WHO WANTS TO BE A MEDIA MOGUL

OCTOBER 14, 1985

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FORTUNE

Corporate Performance

FORTUNE
MAKING IT SAFER TO FLY

Nicholas Gaetano's cover illustration depicts the way passengers would like to fly. See page 20.

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INSURANCE THAT'S NOT SO SURE

Abandoning customary prudence, insurers backed the mortgages of now-collapsed Equity Programs Investment Corp. and are scurrying to cut their losses on huge claims. With insured debt zooming, similar fiascos could nick all sorts of investors.

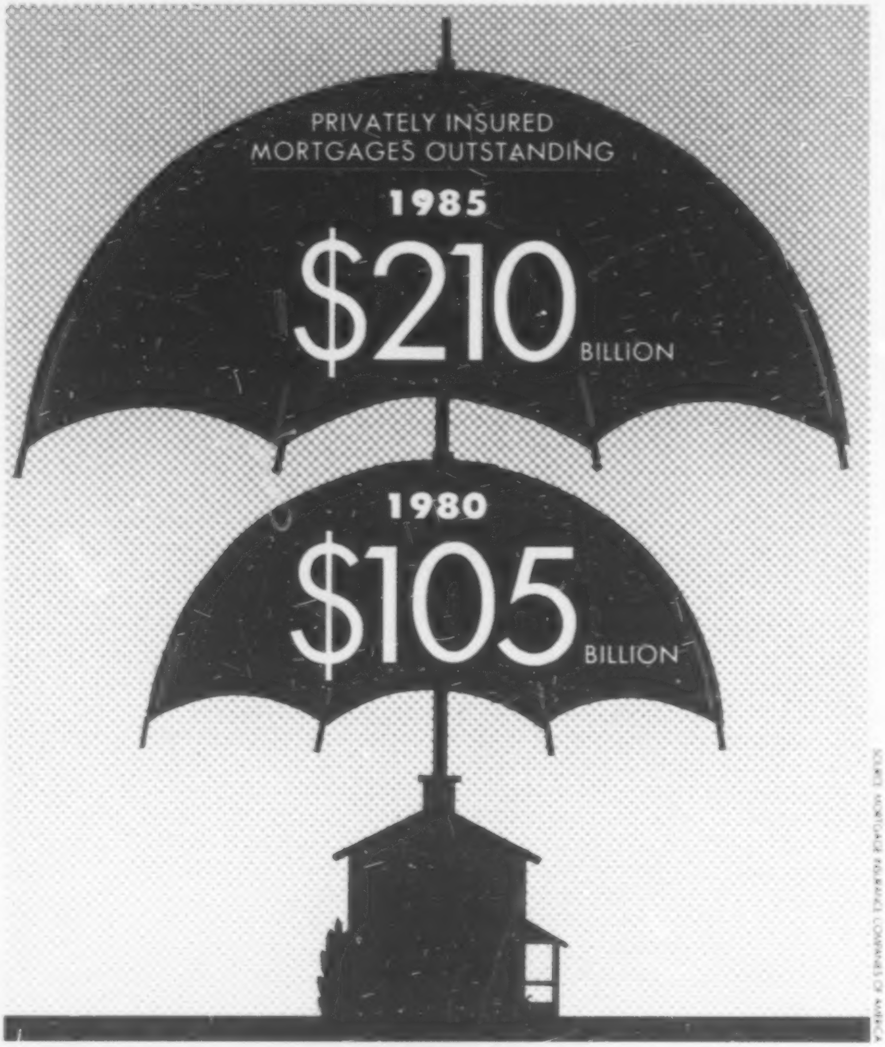
■ *by Gary Hector*

THE HOTTEST financial product of the 1980s is built on a shaky foundation. Over the past five years, the volume of insured debt—mortgages and securities whose payment is guaranteed by an insurance company or top-rated bank—has exploded. Local governments, financial institutions, and corporations have discovered a powerful new alchemy that lowers interest rates for the borrower, reduces investors' fears, and generates big fees for the insurer. But as investors are finding, the insurance is only as good as the procedures used in screening the risks—which recent events suggest are not good enough.

Disturbing questions about insured debt arose in August when an obscure real estate syndicator, Equity Programs Investment Corp. of Falls Church, Virginia, collapsed and brought down its parent, Community Savings & Loan of Bethesda, Maryland. An EPIC affiliate had sold institutional investors nearly $1.4 billion of mortgages and mortgage-backed securities tied to some of the shakiest real estate imaginable—new homes that builders had been unable to sell.

That didn't faze institutional investors, who snapped up the mortgages because they were insured by a half-dozen of the best-known mortgage insurance companies in the U.S. The investors didn't know that the staid, cool heads at these companies had drifted far from the conservative, low-risk approach they normally follow. On September 5, unable to make mortgage payments, 342 limited partnerships set up by EPIC filed for bankruptcy. Within hours the state of Maryland took over parent Community Savings. Several mortgage insurers, faced with heavy claims, have been scrambling to put together a plan to bail out EPIC.

Investors are left to ask what other disasters may be lurking. The business of guaran-



SOURCE: MORTGAGE INSURANCE COMPANIES OF AMERICA

Gimme Shelter, the Lenders Sing

Nervous lenders are rushing to insure themselves against defaults. The biggest debt insurance market, aside from federal guarantees, is in home mortgages. Coverage has doubled since 1980.

ILLUSTRATION BY JOHN PIRMAN

STEVE SMITH—WHEELER PICTURES

Towering insurance claims *face Ticor's Winston Morrow.*

teeing homeowners' mortgage payments is merely the biggest chunk of the financial insurance market; from the end of 1980 to mid-1985, the total of insured mortgages outstanding doubled to $210 billion. Coming up faster is another business also bruised by EPIC's downfall: insuring securities backed by pools of residential mortgages. In the 4½ years through June, total outstanding securities with this coverage increased 130% to $37 billion.

Other types of financial guarantees, still unscathed, are growing at a breakneck pace. Several companies insure the payment of principal and interest on more than $60 billion in outstanding municipal bonds—ten times the total five years ago. Meanwhile, major banks have backed other muni bonds as well as corporate borrowings with a torrent of standby letters of credit, which provide essentially the same guarantee as credit insurance (FORTUNE, May 13). Since 1980 outstanding letters of credit have tripled to $150 billion.

Innovative financial companies are busily fashioning new guarantees. At least one new firm is getting ready to insure corporate bonds, in theory far riskier than any security yet covered. Investment bankers are searching feverishly for ways to bundle up loans on automobiles, commercial real estate, credit card receivables, or whatever, so they can be insured and sold as asset-backed securities—"securitized" in Wall Street jargon.

BEFORE EPIC'S TROUBLES, mortgage insurance was considered a safe, predictable business. The policies cover fixed- and variable-rate mortgages, generally on owner-occupied, single-family houses, that are not backed by federal agencies such as the Veterans Administration. When a home buyer puts up less than a 20% down payment on a house, banks and other lenders usually insist that an insurer guarantee timely payments. The insurer's fee is paid by the borrower.

Until the past few years, losses were rare. Homeowners hardly ever defaulted on loans, and losses were even lower on insured pools of residential mortgages. With few defaults on mortgage insurance, profits were high and insurers eagerly sought more business. But delinquencies rose with the 1982 recession, just when competitors were starting to hold down premiums in a battle for market share. And insurers diversified into dicier and dicier businesses, such as EPIC's.

EPIC's operation shouldn't have qualified for mortgage insurance at all. The syndicator's limited partnerships bought unsold houses from builders, mostly in the suburbs of Sunbelt cities. The partnerships borrowed up to 95% of the purchase price of these houses, which EPIC then rented out. The rents didn't cover the mortgage expenses, but EPIC was betting—and said as much in prospectuses that insurers were free to read—that real estate prices would rise enough to produce a profit for the partnerships. To raise cash to make mortgage payments, EPIC kept selling shares in new limited partnerships. It also borrowed heavily from its parent, Community Savings. By the time EPIC announced it could no longer meet payments on all its debt, the company's limited partnerships owned about 20,500 houses, making the syndicator one of the largest owners of single-family dwellings in the country.

An EPIC sister corporation acted as a mortgage banker, arranging its own mortgages, obtaining mortgage insurance, and then selling the loans either directly or as mortgage-backed securities. Buyers included the Federal National Mortgage Association, and such institutions as PSFS, Philadelphia's largest savings bank, and Silverado Banking Savings & Loan in Denver. PSFS, the largest holder of EPIC mortgages, owns about $215 million of its paper. Mortgage insurers could be liable for the first 20% to 25% of potential losses on the EPIC mortgages. Along with legal costs, these could represent claims of as much as $400 million.

Most of EPIC's insurers have the wherewithal to survive the company's collapse. Mortgage Guaranty Insurance Corp. of Milwaukee, the nation's largest mortgage insurance company and a subsidiary of Northwestern Mutual Life, faces just $15 million in potential losses. Republic Mortgage Insurance, with $100 million in exposure, is owned by Chicago-based Old Republic International, a diversified financial company with pockets deep enough to cover any losses. But Ticor Mortgage Insurance Co., a subsidiary of privately owned Ticor of Los Angeles, faces a possible loss of $161 million, two-thirds its capital.

Winston V. Morrow, 61, chief executive of Ticor, which was taken private in 1984 by a group headed by former ITT chairman Harold Geneen, can't explain why the subsidiary took on so much EPIC business. "I'm left with a sense of amazement and fury," he says. "The EPIC involvement is about as far away from what we planned to do as anything you can imagine." What enticed Ticor and other insurers was EPIC's unblemished record of no defaults prior to last summer. Morrow says the industry's excellent record on claims also "led to a general sloppiness" in evaluating new business. In mid-1984, he says, the industry adopted new, tougher standards for writing insurance but went on increasing its EPIC coverage anyway.

In insuring EPIC's debt, the insurers departed from their customary preference for owner-occupied dwellings. They also ignored flaws in the structure of EPIC's partnerships and failed to see that they were a single, related risk. Normally the industry tries to diffuse its exposure over a large number of small risks. Insuring EPIC's mortgages, says a Wall Street investment banker, "is like insuring individual Boeing 747s."

The bankruptcy petition by EPIC's partnerships has let insurers temporarily off the hook, creating new anxieties for lenders. The insurers will not pay claims until they are given clear title to the insured property. With EPIC in bankruptcy, that could take years.

continued

RESEARCH ASSOCIATE *Cynthia Hutton*

Mortgage insurers and lenders who did business with EPIC are vigorously debating ways to bail it out. A detailed plan developed by Ticor has met strong skepticism from lenders. "It was designed, as you'd expect, to benefit Ticor," sniffs a holder of EPIC's mortgages. The central plank of the complex plan calls for lenders to accept a drop in their interest payments to 9% from an average of 13.5%, with the reduced interest made up when the homes are sold. For the next six years, the insurers would pay the lenders only enough to make up the difference between the rental income on the unsold homes and the reduced mortgage payments.

If a bailout plan isn't quickly accepted by lenders, says an executive of a competing insurer, California's insurance commissioner may take over the mortgage subsidiary. Morrow has already fired the subsidiary's key managers and taken steps to isolate it from the company's main business of writing title insurance. He has also ordered Ticor Mortgage to quit writing new insurance policies—a step that by itself may sound the subsidiary's death knell.

Eager to play, *James Lopp's new company backs corporate debt.*

Confidence in the mortgage insurance industry is eroding as other insurers scurry to minimize their losses from the EPIC fiasco. United Guaranty Residential Insurance Co. of Iowa, a triple-A-rated insurer, has asked a court to excuse it from claims. The insurer says it's not liable because EPIC misrepresented its financial strength when it applied for coverage; when it learned the true state of affairs, United Guaranty says, it returned all premium checks. If the insurer wins its case, some investors say, they will begin wondering what mortgage insurance is good for. Says a Wall Streeter, "People are going to worry that it is written with invisible ink."

Other investors are nervously watching this turmoil, most notably those who buy insured municipal bonds. This year insurance companies and banks are expected to guarantee payment on a record $50 billion in new issues. So far, municipal bond insurers have virtually untarnished records. They rarely have to cough up because they have played it safe, insuring only borrowers whose debt is already rated as investment quality—a Baa rating or above from Moody's Investors Service or a triple-B from S&P. Insurance entitles these borrowers to higher credit ratings—double- or triple-A—and recently saved them as much as a percentage point in interest expense.

While the recent loss experience looks terrific, a lot can go wrong during the life of municipal bonds, which may not mature for 30 years. "You have to realize this is a long-term risk," says Roger Taylor, head of product development at Financial Guaranty Insurance Co. of New York City, a leading muni insurer. Right now, he says, his company is being "very cautious."

NOT QUITE as nervous are commercial bankers, who guarantee a wide array of borrowings with standby letters of credit. Bankers generally stick to short- and medium-term debt, and a senior credit officer at Morgan Guaranty Trust Co. says losses have been "much better than on our commercial loan portfolio." But bank regulators worry that standby letters of credit may represent a huge new debt bomb ticking away. Demand is so strong that some banks are turning away borrowers.

Even as some insurers grow more nervous, others are considering new and potentially riskier fare. Insurance of corporate bonds may be the first new product to make its debut. In late July, Financial Security Assurance Corp. opened shop in New York as the first specialized insurer of corporate debt. The risks are daunting. "Cities don't go out of business," says W. James Lopp, chief executive of the new company and founder of the Municipal Bond Insurance Association, the largest municipal bond insurer. "But if a corporation gets in trouble it can file for bankruptcy and disappear." Financial Security, which hopes to sign up its first customer soon, says it plans to be choosy. It will insure only investment-grade notes and bonds and will structure deals that give it first claim on property, accounts receivable, or other liquid assets if things go bad.

No matter how cautious the insurers, financial guarantees all suffer a common weakness. Because the fate of borrowers varies greatly, it's impossible to construct actuarial tables to determine what premiums an insurer should charge to cover potential losses. Says Lopp, "We're not in an actuarial business." To build up reserves against heavy losses, insurers would have to charge stiff rates that would drive away most customers. That's why insurers not only screen risks, but try to start life with a large capital base to provide a cushion. Financial Security has raised nearly $190 million from 15 backers.

Municipal bond insurers face another hazard: complacency. Losses until now have been so small that in a few years the insurers could be tempted to wage a war for market share, complete with the lowered standards that have singed the mortgage insurers. Losses could be disastrous if a major city defaulted on its bonds.

In light of EPIC's problems and growing skittishness on the part of reinsurers, Standard & Poor's is becoming tougher in rating mortgage insurers. It's also fine-tuning an early warning system that determines when municipal bond insurers are committing themselves too heavily to one debt issue. Some insurers, meanwhile, are becoming so picky they may wind up rejecting lots of business. If so, those who peddle risky financial packages, such as securities backed by loans to builders, may find them uninsurable.

Mortgage lenders can be expected to show some pickiness of their own with insurers, preferring those with more capital and a better record of avoiding undue risks. They'll probably direct more of their business to companies unhurt by EPIC's troubles. But that won't eliminate the underlying uncertainties, or the potential for catastrophic losses, when insurers stray from backing safe, predictable products.

THE STOCK MARKET

The cozy system handed down from Napoleonic times is giving way to American-style trading. London is out front, and is bound to be the big winner.

■ *by Richard I. Kirkland Jr.*

EUROPE'S stock markets are on the brink of revolution, American style. From Milan to Paris to Amsterdam, international competition is forcing brokers and bankers to reform trading methods and break down bureaucratic barriers that in some cases have not changed much since a singularly persuasive regulator named Napoleon shook up Continental bourses in the early 19th century. Some markets are changing rapidly, others more slowly, almost all reluctantly. But none dares stand still.

The big winner is apt to be London. "It's simply naive to think there's any other center in Europe with the breadth, depth, and experience of London," says Michael Altenburg, a Frankfurt-based vice president of Deutsche Bank. The worldwide market will crystallize into three centers, each dominant in its own time zone—New York, London, and Tokyo (see box). If Europe's other exchanges continue to liberalize and modernize, they can become strong regional markets, bearing the same relationship to London as, say, the New Orleans exchange to New York. If they don't, they could travel swiftly from irrelevance to extinction.

Computerized quotes and satellite communications made global markets possible, but the Robespierres of this revolution are U.S. pension funds. Joined by other big institutional investors—in particular British pension and mutual funds—they have been prowling the globe in recent years looking for fresh investments. Since 1980 U.S. pension funds have poured more than $16 billion of their trillion-dollar portfolios into foreign stocks—quintupling their previous overseas stake, according to InterSec Research Corp., a Connecticut-based consulting firm.

Savvy corporate treasurers are learning that by tapping foreign markets they can often raise capital more cheaply and broaden their investor base in the bargain. Some 500 companies are listed on at least one stock exchange outside their home country. A handful of these, such as Imperial Chemical Industries, a British chemical giant, and L.M. Ericsson, a Swedish telecommunications conglomerate, trade more actively abroad than at home. In June, Nestlé, a Swiss food conglomerate, avoided the stock exchanges altogether, issuing $140 million in new shares through the international bank network that handles Eurobonds. "In today's equity markets, borders are becoming irrelevant," says Robert M. Conway, managing director of Goldman Sachs International Corp., the London affiliate of Goldman Sachs, a New York investment banking firm.

RESEARCH ASSOCIATE *Darienne L. Dennis*

For Europe's stock exchanges, the consequences have been both bracing and chilling. Thanks largely to an unprecedented surge of foreign buying, trading volumes and share prices all across Europe have soared to one new high after another. The sole exception to this buoyant turnabout is Greece, where the statist economic policies of the Papandreou government have made its backwater bourse even more so.

But the growing cross-border trading by deep-pocketed foreigners has also exposed numerous flaws in European markets. Says Malcolm Duncan, an official of the Milan Stock Exchange: "Europe's exchanges have been stubbornly attached to their traditional domestic markets and to their private clients. They're late in facing up to the fact that tomorrow's equity markets will be international and dominated by institutions, not individuals." The list of shortcomings is long. Institutions, especially American ones, invest the way Chicago Democrats of Mayor Daley's era voted—in big blocks and often. But outside of London, exchanges typically are open just two hours a day. Prices are not set by continuous processing of individual orders. Instead, buy and sell orders at various prices accumulate before trading begins, and at the opening a price is set that will move the most shares. To buy a big block of stock, an institution may have to pay a fat premium to attract enough sellers—and it may take a pasting when it sells.

continued

No computers *or electronic tote boards track the*

American fund managers are gluttons for information on the stocks they pick. But European accounting practices are often opaque by U.S. standards, and corporations make little effort to keep investors well informed. London's leading brokerage houses produce some first-rate research, but it's rare on the Continent. "The so-called research coming out of places like Switzerland, Holland, Sweden, and Germany is a total joke," gripes a Geneva-based money manager whose firm has a multibillion-dollar portfolio. "It's usually little more than a two-page rehash of a company's annual report."

Above all, U.S. institutional investors expect to pay razor-thin commissions. But ten years after Wall Street eliminated fixed commissions, no Continental exchange has fully embraced the concept. As a result, brokerage costs can be breathtakingly higher in Europe than in the U.S. In an exhaustive study of European stock markets prepared last year for the European Commission, Michael Hall, an official of the London Stock Exchange, and the Milan exchange's Malcolm Duncan compared fees on a $150,000 order. They found that the cheapest price in Europe, which happened to be on the Milan exchange in Italy, was 32% higher than the typical U.S. fee, including transaction taxes. The cost in Britain was as much as 300% higher, thanks partly to a stiff 1% government stamp duty.

London is in the vanguard of radical change. Two years ago, as part of the settlement of a seven-year-old antimonopoly suit, the London exchange agreed to abandon fixed commissions. That led to the more sweeping decision to deregulate the entire British market. The authorities realized that, deprived of guaranteed commissions, many undercapitalized London brokers would perish unless they merged with stronger firms. Says Sir Nicholas Goodison, chairman of the London Stock Exchange, "It was obvious that if London was to be a large market for overseas securities, we would either have to allow our members freedom outside the market, or invite the outsiders in."

Under Britain's old system, an otherwise world-class stock market operated as a cottage industry. Merchant banks handled corporate finance and underwrote shares, while so-called jobbing firms monopolized trading and made markets on the exchange floor. Brokers were limited to acting as agents for investors. As a result of this fragmentation, all the various players were woefully undercapitalized by American and Japanese standards. In the new system, which will be operating fully before the end of next year, no competitive holds will be barred. All financial institutions, including foreign and domestic banks, will be allowed to join the stock exchange and engage in the full range of securities transactions. Banks are still denied that privilege in the U.S. and Japan.

In anticipation of this so-called deregulatory Big Bang, British, American, and European banks have been buying up brokerage houses like bargain-crazed tourists at a Harrods summer sale. In little more than a year they have plunked down more than $1 billion for major stakes in 19 of London's top 20 brokers as well as in the three biggest jobbers. U.S. investment banks have stayed out of the shopping spree, but Goldman Sachs, Merrill Lynch, Morgan Stanley, and Dean Witter Reynolds are rapidly expanding their London staffs.

TOTAL MARKET VALUE OF SHARES

BILLIONS OF DOLLARS (est.)

Europe	**$700**
Britain	$302
West Germany	$118
Switzerland	$63
France	$58
Italy	$45
Netherlands	$42
Other	$72
Japan	**$731**
U.S.A.	**$1,783**

SOURCE: CAPITAL INTERNATIONAL PERSPECTIVE, SA, GENEVA, SWITZERLAND

A Three-Cornered World Stock Market

Europe's exchanges are tiny. The value of all shares on the Paris bourse at the start of 1984 was about half the market value of IBM shares on the New York Stock Exchange.

Negotiated commissions will be phased in on the London Stock Exchange sometime next fall. Last year, however, to stanch growing losses of international business to London-based American investment banks, the exchange allowed British brokers to negotiate commissions and make markets on their own account in foreign stocks. Now on a given day, more shares of Germany's BASF, Switzerland's Ciba-Geigy, or France's Source Perrier may trade in London than in Frankfurt, Zurich, or Paris.

Exchanges on the Continent have counterattacked by trimming commissions or permitting big rebates on large orders. Switzerland may soon allow fully negotiated commissions on trades above $825,000. But many Europeans cling to the idea that they can get by with merely lowering rather than unfixing commissions. "We're not interested in negotiated commissions right now because we'd like to retain some profitability," says Voubewign Baron van Ittersum, chairman of the Amsterdam Stock Exchange. But such Canute-like resistance will almost certainly be washed away. Predicts David M. Booher, a vice president with InterSec Research in London: "Three years from now, there won't be a major market in the world that doesn't allow negotiated commissions for institutional buyers."

INTERNATIONAL PRESSURE is also gradually prying the Continental bourses loose from their adherence to collective price setting and limited trading hours. In the past year or so most exchanges have begun letting institutions trade for a few hours before the exchange officially opens. Such "off-market" trading, as it is called, is large and growing. In Paris, for instance, it accounts for 30% to 40% of the exchange's volume. The French, though, have so far refused to abandon their price-fixing system. Off-market trades must be executed at the previous day's price. German banks trading off market can, at the client's request, ignore the officially fixed price and trade at whatever price closes a deal.

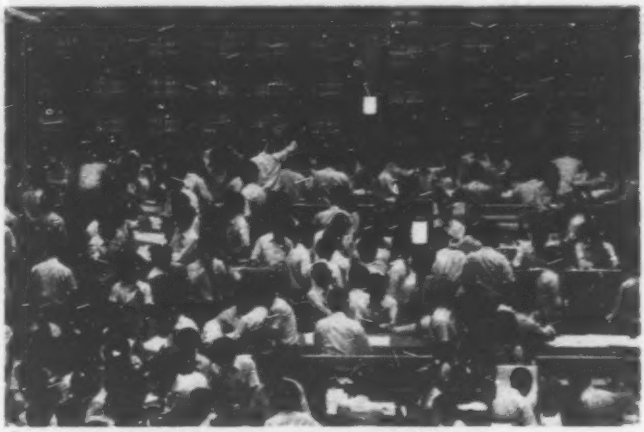
Italy is edging toward continuous pricing. This November the share prices of five major Italian companies with a market value of $6.8 billion—17% of the market value of all companies listed on the Milan exchange—will be allowed to move up and down as orders come in throughout the day. By contrast the Paris bourse, which has been making noises along these lines for six years, won't begin continuous, full-day trading of the most popular French stocks until sometime next year.

The Amsterdam exchange, long one of Europe's most internationally oriented, has decided to stop nibbling at the old system and swallow some big changes whole. In September, official trading in Amsterdam expanded from two hours a day to 6½ hours. At the same time, the exchange began using a new electronic trading system that allows continuous trading of the leading Dutch securities. Such reforms should help blunt London's inroads into the Dutch market and stimulate trading in the 294

THE JAPANESE HAVE REPRODUCED THE BIG BOARD

■ International competition is shaking up the Japanese stock market as much as those in Europe. In April Japan slashed broker commissions by 50% on big-block trades. But the Japanese still regard negotiable commissions as just one more noxious Western import they could happily live without. "It is better for us to have that day come as late as possible," says a Japanese broker. Tokyo's neighbor to the south, however, the much smaller Sydney Stock Exchange, has already taken the plunge. Last year Australia became the first market outside the U.S. to adopt negotiated commissions. With London now poised to deregulate as well, most Japanese brokers privately admit that negotiated commissions are as inevitable as the rising sun.

In many respects, Japanese securities firms and the Tokyo Stock Exchange are in better shape than many of their Continental European counterparts to cope with the challenge of overseas market-makers. Japan's markets operate largely on the American model. Trading hours are long and prices change continuously with the flow of buy and sell orders. The Big Four brokers—Nomura, Daiwa, Nikko, and Yamaichi—are well-capitalized, aggressive sellers, and essentially share the American vision of a future global equity market dominated by a score of giant firms. Like their U.S. counterparts, they also fiercely resist sharing that market with the big Japanese banks, which would like to compete but are prevented by a Japanese version of America's Glass-Steagall Act from participating in the securities business.


Trading hours *are long on the Tokyo Stock Exchange.*

TOSHI MATSUMOTO—SYGMA

Tokyo's market is the second largest in the world, with over $700 billion worth of shares—more than all of Europe combined. Foreign investment now accounts for more than 15% of all trading in Tokyo, a threefold increase in nine years. Over half that money comes from Europe. When they buy foreign securities, Japanese investors prefer bonds, but they are gradually developing a taste for blue-chip overseas stocks, such as Volvo, IBM, General Motors, and British Telecom. In general, foreign shares offer dividends far higher and price-earnings multiples far lower than the paltry 1% dividends and the towering P/Es of 32 times earnings typical in Tokyo. In response, Japanese securities firms are starting to beef up their international research staffs. At Daiwa Securities, eight analysts now follow foreign stocks, up from two a few years ago. "And even that's not enough," says Minoru Mori, Daiwa's international general manager.

Still, Tokyo remains a formidably insular market. Only 14 foreign stocks (including IBM and General Motors) are listed on the Tokyo Stock Exchange, by far the smallest number on any major exchange. Twelve overseas brokerage houses—eight American and four British—enjoy branch status in Japan. But none has won a seat on the exchange, despite a rule change three years ago opening the exchange to foreigners. Merrill Lynch came close last spring. But its $5-million bid for a seat was topped by a $6.6-million offer from a medium-size Hiroshima outfit.

The internationalization of the Tokyo market may be on the verge of a great leap forward. Mori of Daiwa predicts that by year's end seven or eight more foreign stocks will join the Tokyo exchange, now that it no longer requires a formal—and expensive—Japanese audit before granting a listing. American Express and McDonald's, among others, have expressed interest in trading in Tokyo. Officials at the Ministry of Finance and the Tokyo Stock Exchange say that within a month the exchange will raise the ceiling on seats from 83 to more than 90 with the implicit, though unexpressed, purpose of accommodating more foreigners.

The price of admission is likely to be stiff—around $5 million. By contrast, officials at the London Stock Exchange, which will expand from 220 seats to more than 260 when outsiders are admitted next year, expect that joining their club won't cost much more than $500,000. Some Japanese wonder what the foreigners see as so valuable about their humble exchange. Says Hideaki Yamashita, research director at the Tokyo exchange: "From the viewpoint of a cost-benefit analysis, paying so much for a seat doesn't make sense for most foreign securities firms." The foreigners beg to differ. Says Stephen C. Richardson, Tokyo general manager for W.I. Carr, Sons & Co., a British brokerage house: "We want a seat. The returns will be very marginal today, but we're here to stay and we intend to grow."

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foreign stocks listed in Amsterdam.

The biggest shock wave won't come from the gradual change in these antique systems but from the emergence of a handful of giant firms that will dominate the underwriting and trading of multinational securities. They'll also be capable of making their own markets to trade foreign stocks outside existing exchanges. "We're going to end up with 12 to 20 global firms, mostly American," says Stanislas M. Yassukovich, chairman of Merrill Lynch Europe and Middle East.

In coping with this prospect, Europe's markets divide into two camps. The Swiss and German exchanges, which are dominated by big banks, and Amsterdam, which allows a mix of bankers and brokers, are about as well armed as they can be. But in the bourses monopolized by brokers—Paris, Belgium, and Spain—the capital shortage is even more acute than the one that previously plagued London.

These markets all function under an arrangement devised by Napoleon more than 175 years ago. Brokers, called *agents de change* in France, are appointed by the Ministry of Finance and given a collective monopoly on all stock market transactions. In exchange for this privilege, brokers face unlimited individual, as well as collective, liability. "If you make money the profits are yours. If you lose, everybody shares in your bad luck. So you see why we watch each other very closely," says one young Parisian *agent de change*. To snare institutional business, U.S. investment firms will swallow a big block of stock an institution wants to unload. *Agents de change* aren't permitted by exchange rules to buy on their own accounts. The bourse is considering lifting the restriction, but in any case the *agents de change* don't have enough capital.

THE OBVIOUS WAY to attract capital to the bourse is to let French banks trade securities directly, as they are eager to do. Many observers think the French government will eventually be forced by international competition to permit such deregulation, though the *agents de change* are sure to resist bitterly.

In Germany and Switzerland the big players, such as Deutsche Bank and Union Bank of Switzerland (UBS), have no lack of raw financial muscle. But by their own admission they are hampered by a shortage of skill—at least in their equity operations. To correct that deficiency, they are drawing upon American models. Says Rudolf G. Müller, head of securities sales and trading at UBS: "We're trying to copy the successful U.S. investment banks to a much greater extent." Today UBS has more than 80 securities salesmen, up from a dozen or so ten years ago. UBS, Switzerland's largest bank, and Deutsche Bank have also forged alliances with talent-laden foreign equity houses. Last fall UBS bought 29% of Phillips & Drew, a top London brokerage house with a strong research team, and plans to buy the rest of the firm's shares next year. Deutsche Bank bought a 5% stake in Morgan Grenfell & Co., a leading London merchant bank and the biggest non-U.S.-based manager of American pension fund assets.

The immediate prize the Swiss banks are chasing is the $55 billion held by Swiss pension funds, one of a handful of really sizable European institutional holdings outside London. The Swiss funds have less than 4% of their assets in equities, peanuts by the lights of U.S. funds, which typically invest 50% to 60% of their portfolios in stocks. The Swiss banks are also hoping to defend their prize possession—an estimated $206 billion of private client assets—against steady incursions by British, American, and West German financial behemoths.

By improving their research, the Swiss—and other European equity market players—also may ensure that a large portion of the institutional action in their domestic shares continues to pass through their hands. "With better selling of information, European brokers can offset some of the superior trading skills that U.S., British, and Japanese firms offer institutions," says H. Jörg Graf, director of research at Zurich's Bank J. Vontobel & Co. and one of the few Continental analysts whose reports are closely read rather than routed to the wastebasket. "No one's going to be able to adequately research the top 200 internationally traded stocks by telephone, so research should remain localized."

CHRIS STEELE-PERKINS—MAGNUM

Radical change *is the order of the day in London under Chairman Sir Nicholas Goodison.*

Europe's smaller exchanges, and the governments that regulate them, need not fear becoming regional markets in London's shadow. If they continue to expand and improve their domestic markets, their overall business can grow even though their international market share shrinks. "My friends on the Continent sometimes express the fear that London is mounting a takeover bid for the European securities business, following the old British imperial tradition," says the London exchange's Goodison. "It is in everyone's interest that the capital market in each country should flourish."

In Italy, for example, the stock market was so moribund a few years ago that it nearly expired. Trading was thin and volatile, dominated by the decisions of a handful of wealthy families. Last year, however, the government finally introduced mutual funds after 15 years of debate. Since then more than $5 billion has flowed into those funds and over $1 billion of that total into Italian stocks.

Propelled by that surge in demand and a big influx of foreign investment, share prices on the Milan exchange have climbed more than 65%, and trading volume has tripled. Some dozen companies have announced plans to issue new equity. Says Roger Hornett, director of European research at James Capel & Co., a leading London broker: "Within a year the Italian Stock Exchange has gone from being a casino attractive only to speculators to a market increasingly dominated by serious institutional money seriously managed."

The changes under way in European stock markets will undoubtedly leave plenty of blood on the floor of the bourses as banks and brokerages merge or go bust. But in the new world of cross-border computerized trading, those markets that fail to adapt will simply be bypassed. Says James Norton, head of the investment division at Morgan Grenfell: "The world's equity markets are gradually going the American way. In the end, that's going to mean more efficient pricing, better information, and better liquidity." For companies that sell stock and investors in Europe the revolution can't come soon enough. ■

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FALL 1985

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HIGH-SCORING STRATEGIES WITH STOCKS

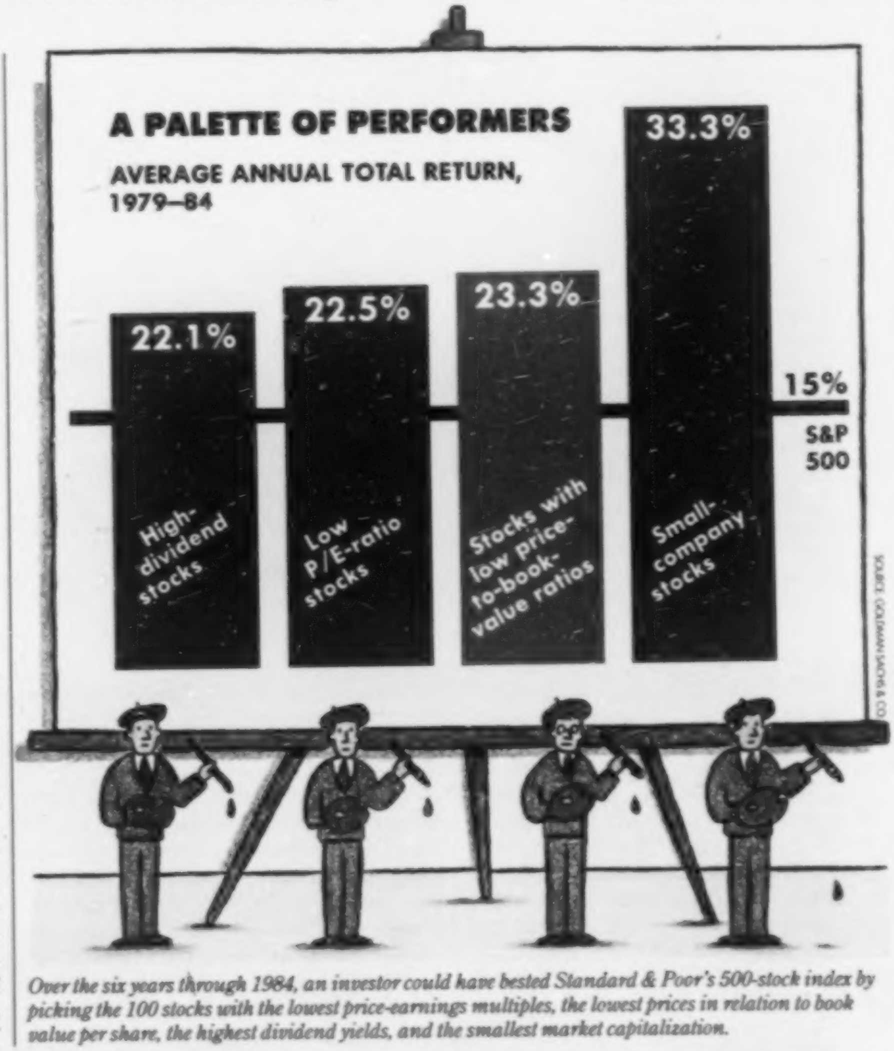
The market is tough to beat. But investors can come out ahead by shunning well-known companies with dazzling records—and stock prices—in favor of little or lackluster companies that sell for a song.

■ *by John J. Curran*

NOBODY LIKES being average, least of all investors. In a tireless quest to beat the stock market averages, Wall Street firms spend vast sums, hire legions of financial analysts to forecast company earnings, and spend countless hours poring over stock market data in the hope of divining future market movements. Individual investors vie for outsized returns too, paying hefty commissions to brokers in return for advice that could give them an edge. Yet for all that effort, the results are often disappointing. Right now the pros are on a losing streak. The average professionally managed portfolio monitored by SEI Corp., a Wayne, Pennsylvania, firm that tracks money managers' performance, beat Standard & Poor's 500-stock index in only two of the eight calendar quarters that ended in June 1985. For ten years, in fact, most professionals have trailed the market.

That comes as no surprise to proponents of the efficient-market theory. Because stock prices quickly move to take account of all publicly available information about companies, this school maintains, efforts to beat the market are doomed from the start. The only hope of doing it, this group says, lies in either trading illegally on inside information or buying especially risky stocks. If the efficient marketers are right, an investor's only recourse is to follow the lead of an increasing number of pension funds and other institutions that have thrown in the towel. They've put their money in so-called stock market index funds that follow the ups and downs of the S&P 500 like a shadow—never under-

RESEARCH ASSOCIATE *Brett Duval Fromson*



Over the six years through 1984, an investor could have bested Standard & Poor's 500-stock index by picking the 100 stocks with the lowest price-earnings multiples, the lowest prices in relation to book value per share, the highest dividend yields, and the smallest market capitalization.

performing it, but never outperforming it either.

Yet the individual investor's prospects may not be so bleak after all. As the chart on page 25 suggests, investors who concentrated in recent years on certain types of stocks—generally low-priced stocks—have run circles around the S&P 500. Defenders of the efficient-market theory grudgingly attribute these successes to "market anomalies," or unexplained irregularities, that may be a passing thing. But if the anomalies persist, as many savvy folks on Wall Street believe they will, investors can exploit them for above-average gains.

The winning investment strategies seek to profit from a widely held theory: most of the time, a large number of stocks sell for less, sometimes substantially less, than they are worth. Determining precisely what a stock is worth, which Wall Streeters call its intrinsic value, is impossible. But many investment firms try to get a rough idea by using what's known as the dividend discount model. Simply put, the model determines the present value of a company's projected stream of future dividends. Wall Street firms all have different proprietary versions of the dividend discount model. With some the findings are expressed as an anticipated total return on each stock—dividends plus price appreciation—in the near future. Other models estimate each stock's intrinsic value so it can be compared with the current market price.

To get a handle on intrinsic value, security analysts first forecast long-term earnings growth for each company and then predict its dividend-paying capability. To discount future dividends to their present value, they use an interest rate based on the yield on long-term Treasury bonds, currently about 10%. Thus discounted, a $1 dividend to be paid in the year 2000 would have a present value of about 25 cents. As interest rates change, the present value is updated.

No one knows, of course, what a company's dividend will be 15 years hence. But by using long-term growth-rate projections and estimating a company's future financing needs, analysts try to guess how much money will be available for dividends in years to come. Even stocks that currently pay no dividends at all are valued this way; it's assumed that at some point successful companies will begin generating excess cash that they can disburse to shareholders.

The dividend discount model is cold and calculating. Investors are not. Though a company's intrinsic value may not change much from month to month, stock prices nonetheless bounce all over the place. That's because investors do not always buy or sell stocks on the basis of intrinsic value. They often buy because they are impressed by a company's management or an exciting new line of products. They often sell because they fear an oncoming recession or some other event that could damage near-term earnings. Hence, market prices can swing far above or far below what stocks are actually worth according to the dividend discount model. Therein lies opportunity.

> *Winning strategies profit from a widely held theory: a large number of stocks generally sell for less, sometimes substantially less, than they are worth.*

If lots of underpriced stocks truly exist, though, why aren't those savvy pros with all their formulas and fancy computer programs snapping them up? Well, some of them are. In recent months, with the stock market averages close to record highs, relatively few stocks were selling below their intrinsic value. But Morgan Stanley, on the basis of crunching stocks through the dividend discount model, saw bargains in such companies as Manufacturers Hanover, the bank holding company; Travelers Corp., the insurer; and Hospital Corp. of America. The model showed that Hospital Corp.'s stock, for example, was worth $47 a share; its recent market price was $41.

Many pros, however, are loath to recommend stocks that show up on computer screens as undervalued. Undervalued companies tend to be pariahs to the financial community—typically their earnings have temporarily collapsed or they are facing big lawsuits or flirting with bankruptcy. Says Tony Estep, head of Salomon Brothers' strategy systems group, which tracks the results of different investing approaches: "The stocks that come up looking cheap also happen to be uglier than sin. Money managers are reluctant to build a portfolio of companies like that." Yet Estep's findings indicate that over the years, unloved stocks have been among the best performers around.

Running thousands of publicly traded companies through the dividend discount model is beyond the resources of the individual investor. But by following simple strategies—none of which require an earnings forecast—it's possible to come up with good results. Steven Einhorn, co-chairman of the investment policy committee at Goldman Sachs, discerns four strategies that would have been winners over the six years through 1984: concentrating on stocks that ranked in the 20% of the S&P 500 with the lowest price-earnings multiples, or the lowest market prices in relation to book value per share, or the highest dividend yields, or the smallest market capitalization (total market value of all outstanding shares).

The performance figures in the chart on page 25 are artificial in that they exclude trading commissions, which can be considerable. Moreover, the six-year period over which Einhorn tracked these investing strategies is too short to prove that they will invariably work. But each of these strategies has been studied over longer periods and in actual portfolios. The results are still superior. And while the small investor cannot afford to hold portfolios containing 100 stocks or more, the results argue strongly for concentrating investments in these four areas.

That simple strategies should work so well in the complicated world of stocks is no coincidence. Like the dividend discount model, which compares a stock's current price with its intrinsic value, the first three of these strategies focus directly on ratios or percentages that involve price. Price isn't the same as value, but it helps investors narrow the search for bargains. Sanford C. Bernstein & Co., a New York-based invest-

INVESTMENT STRATEGY AND VEHICLES

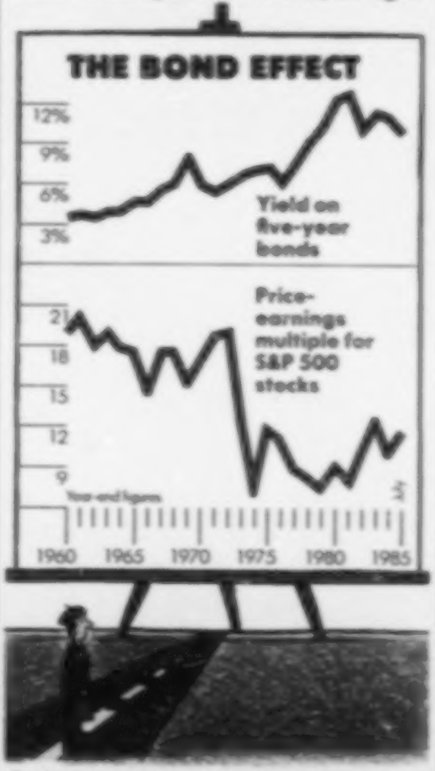
ment firm, has achieved above-average returns by adhering religiously to the dividend discount model. Says Peter Carman, chief investment officer: "Our approach to finding value is far more elaborate than any simple ratio. Yet stocks that we find to be undervalued also tend to have some common characteristics: low P/Es, low ratios of price to book value per share, and high dividend yields."

That out-of-favor companies should offer higher returns is not surprising. "It makes perfect sense," says Estep of Salomon Brothers. Over time, he says, an investor's return from owning a particular stock should roughly equal what it costs the company to raise capital. In a rational world a company with a terrific track record and excellent prospects should be able to issue stock at a high price with a lofty P/E multiple, while a lackluster company with less exciting prospects would have to issue cheaper shares with lower P/Es and price-to-book ratios and offer above-average dividend yields.

It stands to reason, Estep adds, that investors who buy expensive stock from terrific companies should not expect above-average returns. In particular, he says, investors should be leery of high-growth companies, the elite of American industry. These companies have brilliant managers and chalk up dazzling profits; institutional investors love them. But they have one major drawback. As the late Benjamin Graham, the father of value-based investing, succinctly put it: "Common stocks with good records and apparently good prospects sell at correspondingly high prices." Adds Einhorn of Goldman Sachs, "Many investors are of the opinion that you ought to buy good-quality, growth-oriented companies, and they pay a premium for that. They focus so much on growth, to the exclusion of price, that they overpay for good growth."

Because the market overvalues growth, it also excessively discounts the lack of it. Investors who specialize in underpaying for companies with sluggish growth and other problems are often described as contrarians, because they're willing to run against the herd. One of the most outspoken is David Dreman, managing director of Dreman & Embry, a New York-based money management firm, and author of *The New Contrarian Investor*. Dreman recently concluded a study of low-P/E-stock performance over the past 12 years. He divided the Value Line list of 1,700 stocks into ten groups ranked by P/E and reviewed the performance of each group through good markets and bad.

"The results are amazing," Dreman says. "In good stock markets, low-P/E stocks did better than high-P/E stocks, and in bad markets, the low-P/E stocks declined less." In fact, he adds, the lowest-P/E stocks did best of all. Among Dreman's favorite low-P/E stocks these days in Allied Stores, the big retailing chain that owns and operates such well-known stores as Brooks Brothers and Garfinkel's, and has sold lately at a P/E multiple of seven times the company's earnings in the past four quarters. He also likes R.J. Reynolds Industries, the big tobacco producer that recently merged with Nabisco Brands, the cookie company. At recent prices, Reynolds commanded a P/E multiple of 6. Both stocks are well below the average stock market P/E multiple of 11.5.



Stocks are constantly competing with bonds for the investor's dollar. So when bond interest rates rise, the price-earnings multiples of stocks tend to fall. The two movements don't exactly mirror each other, however, because stock prices react to other developments, such as earnings trends.

How is it that such simple ratios as these, based on reported past earnings and reflecting no forecast of earnings, can be so pregnant with implications for future stock price performance? For one thing, some mighty important information is packed into a P/E. Consider, for example, two hypothetical companies, one with a return on shareholders' equity averaging 20%, far above the industry norm, the other a hard-luck story, averaging only a 10% return on equity. Our highly profitable company, call it Worldbeater Enterprises, is selling at a price-earnings multiple of 14. For simplicity, assume it earned $1 a share in the past four quarters and sells for $14 a share.

Fourteen times earnings may seem a bargain for a company with above-average profitability. But look again. Invert the P/E: instead of dividing price by earnings, do the reverse. What you get is not Worldbeater's return on equity, but your own personal return on equity, more properly called the earnings yield. In this example, your earnings yield works out to a not-so-rosy 7.1%. Our hard-luck company, Rustville Gear Works, may sell at a P/E of 7. But the investor's earnings yield is 14.3%.

To be sure, focusing narrowly on P/Es has pitfalls. The quick and simple comparison of multiples ignores each company's growth rate, which bears importantly on value. Moreover, on rare occasions growth stocks with high P/Es can perform better than low-growth, low-P/E companies. When interest rates fall, all P/Es tend to rise, and when interest rates rise, all P/Es tend to fall (see the chart at left). That's because sophisticated investors constantly compare the earnings yield they can get from stocks with the return they can get on bonds. The inverse relationship between P/Es and interest rates is magnified in the case of high-P/E stocks. These stocks tend to be of fast-growing companies that need barrels of cash to finance growth and aren't likely to have much available for dividends in the near future. Thus the present value of the company's far-off dividends is highly sensitive to even the slightest change in interest rates. A sharp drop in bond rates, as occurred in the last half of 1984, can send the value of high-P/E stocks soaring.

Investors who focus only on low-P/E stocks will miss yet another opportunity. In the trough of a recession, so-called cyclical companies, whose earnings rise and fall with the economy, show extremely high P/E ratios simply because their earnings are depressed. A simple search for low-P/E stocks won't catch them. Still, says Carman of Sanford C. Bernstein, a low-P/E approach to stocks should enable investors to ferret out most of the undervalued stocks.

Investors who zoom in on stocks selling at a low percentage of book value per share also stand to book big profits. Book value per share is another name for the net worth of a

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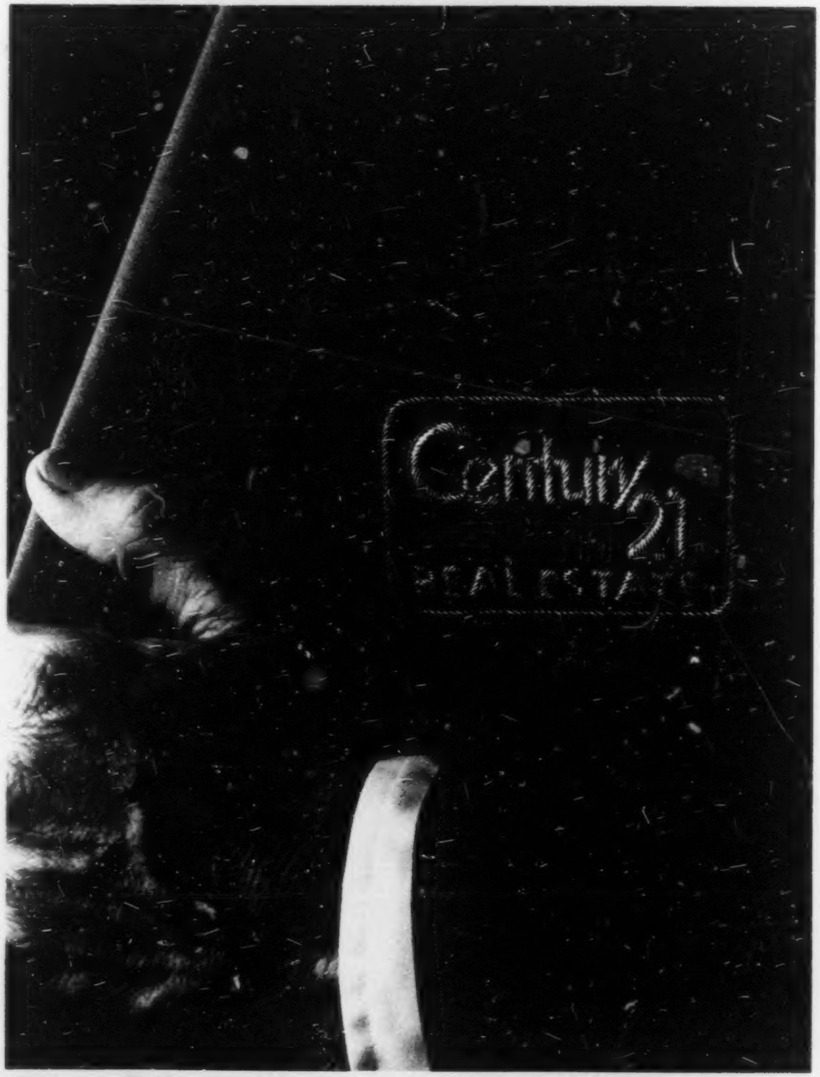

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company—what's left after all the liabilities are subtracted—divided by the number of shares of stock. It's no coincidence that low-P/E investing and low price-to-book-value investing should both produce good results. The two strategies are similar. Assuming no change in a company's profitability, a drop in the price-to-book-value ratio will mean a drop in the P/E as well. Of course, profitability does change and P/Es and price-to-book-value ratios don't always move in tandem. So it pays to look at both when searching out undervalued stocks.

If low ratios are desirable, high ratios are to be avoided like an infectious disease. Estep of Salomon Brothers says the normal range of price-to-book-value ratios for S&P 500 companies is between 0.8 to 1 and 4 to 1. Over time, he says, most companies gravitate toward the middle of that range. Hewlett-Packard, for example, sold at a lofty five times book value per share in 1970. "You could have bought it almost anytime in the past 15 years and not made a return greater than you'd have had from a government bond," Estep says. "That's not because Hewlett-Packard's earnings didn't grow—they grew like a shot. Rather, you didn't make money because over that time the stock was going through a constant downward valuation in its price-to-book ratio." Lately Hewlett-Packard has sold at 2.4 times book value per share.

On the other hand, investors who buy stocks selling at low price-to-book-value ratios can bask in the sunny prospect that, barring catastrophe, their stocks should slowly move upward toward the average. As an example, Estep points to the stocks of natural-gas pipeline companies that sold at deep discounts to book value in the late Seventies, but now sell at a premium. In 1978 the stock of Coastal Corp., which operates oil refineries as well as natural-gas pipelines, sold at about 50% of book value per share. Today it sells at a lofty 179% of book value. Recently U.S. Steel and Ford Motor Co. were both selling for less than their book value per share, while the average stock on S&P's 400-stock index sold for 167% of book value.

High dividends can be another route to big investment returns. Perhaps the biggest decision a stock picker must make is how much of his winnings he wants to receive up front in dividends and how much he's willing to let ride on the future growth of the company and its stock price. John B. Neff, portfolio manager of the Windsor Fund, one of the most suc-

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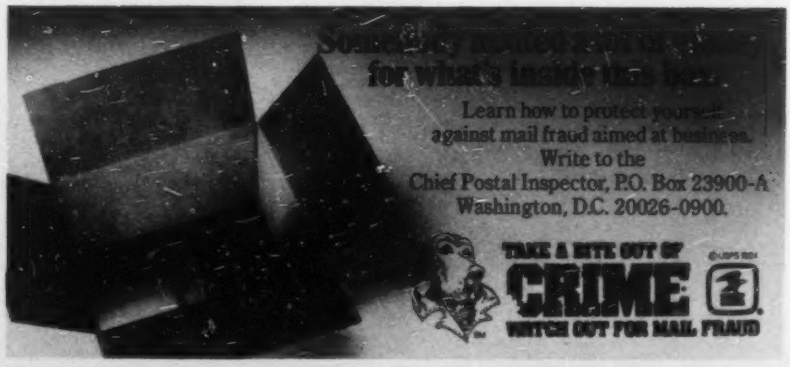

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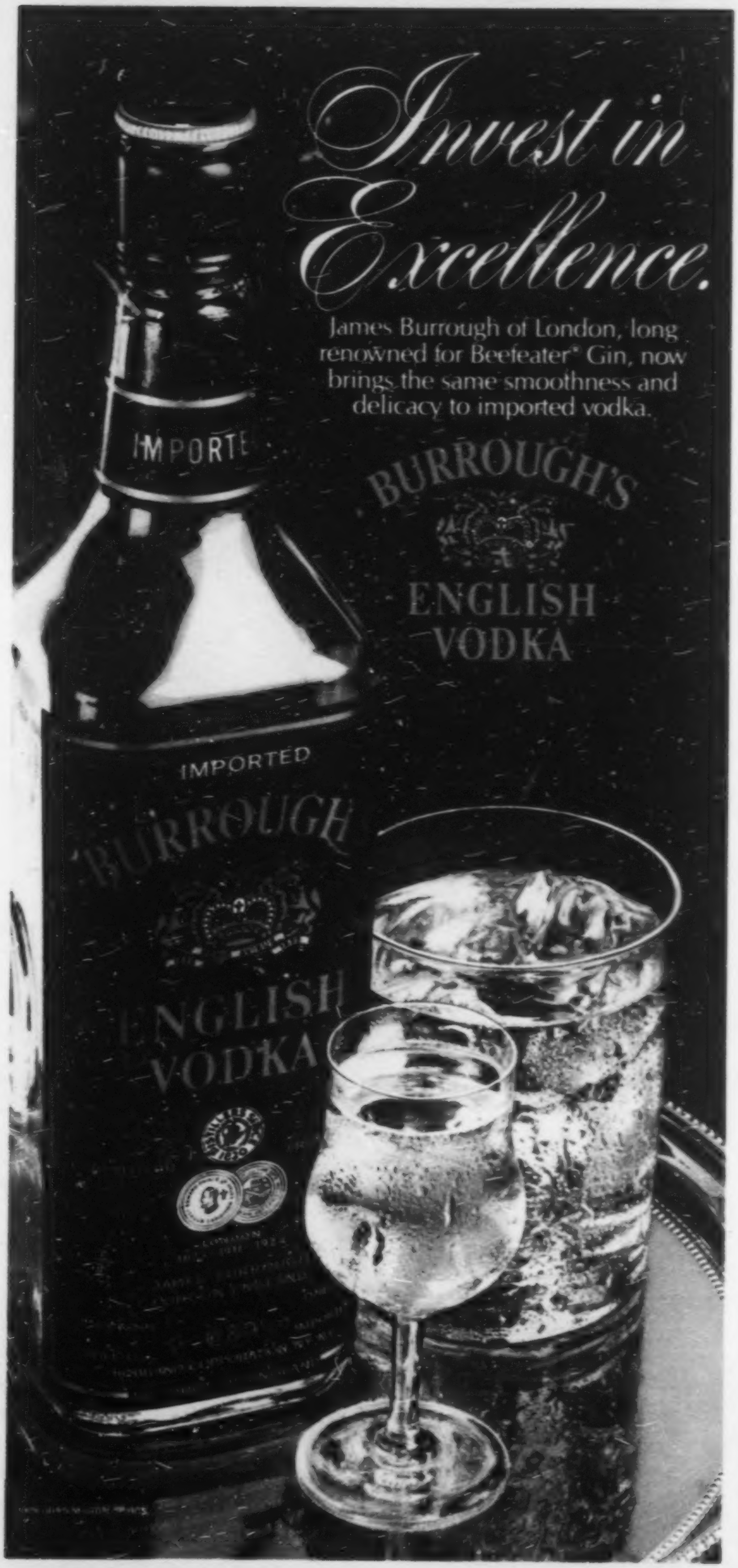
cessful mutual funds around, plumps for the dividends. "High growth rates can be assaulted by all sorts of challenges, from new competitors to changing market conditions," Neff explains. "Growth rates can be instantaneously revised. But an awful lot has to go wrong before the dividend suffers." Because growth rates are so vulnerable, Neff steadfastly avoids companies with projected growth of over 20% a year. "The mortality rate of those over-20% companies is just too high," he insists.

Investors who screen the stock market for high-yield stocks are likely to end up with a portfolio of utility companies. Some utilities pay extremely high dividends, but that's because the stock has plunged on the market's worries that the dividend may be cut or eliminated because of overruns on nuclear construction projects. Two of the highest-paying electric companies free of such headaches are Houston Industries, with a dividend yield of 9.9%, and Commonwealth Edison, yielding an even higher-voltage 10.1%. Both yields dwarf the 4.5% average for companies on the S&P 500. To avoid concentrating assets in one industry, dividend hunters would do well to scan each sector of the S&P 500 for the highest-yielding stocks and assemble a diversified portfolio.

By far the most successful of the four investment strategies in recent years has been the one that virtually ignored the price of a stock. By building a portfolio of stocks with small market capitalization, investors could have achieved some of the biggest gains of all over the past six years. A longer-term study by Rolf Banz, now at the European Institute of Business Administration in Fontainebleau, France, looked at stocks with market capitalizations under $50 million, going all the way back to 1926. Banz found that small stocks have been spewing out rich returns for at least half a century.

This discovery has not escaped the pros. Dimensional Fund Advisors, a money management firm set up in 1981 to exploit the opportunities in small-capitalization stocks, has already attracted more than $2 billion. In the three years through June 1985, the firm's stock portfolio was up 123%, counting reinvested dividends, vs. a 100% rise in the S&P 500. David Booth, Dimensional Fund's chairman and chief executive, sees a similarity between the superior returns on small-capitalization stocks and the above-average returns on junk bonds issued by companies with low credit ratings. "In both cases," he says, "the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perceived risk of bankruptcy or default is greater than the real risk, so investors wind up getting compensated for risks that don't actually exist."

When the stock market declines, even a portfolio of undervalued stocks is likely to suffer. One way to smooth out that risk, and gain higher returns to boot, is to add a generous helping of foreign stocks to a portfolio. Foreign stocks aren't safer; in fact their prices bump around more than those of American stocks. But because they are riskier, they tend to yield a higher return. From 1970 through 1984, a U.S. investor in foreign stocks enjoyed an average total return of 9.5% a year, adjusted for currency changes, well above the 8.8% return on American stocks. Since foreign economies and stock markets tend to peak at different times than America's, these stocks have a comforting way of rising when U.S. stock prices are going down.

Barton Biggs, head of international investment strategy at Morgan Stanley, has yet another reason for looking overseas. In Biggs's view, one of the main trends of the next few years will be the further decline of the American dollar against major foreign currencies. If he's right, American investors who venture abroad now could enjoy a double scoop of profits—one from rising foreign stock prices, the other from rising currencies.

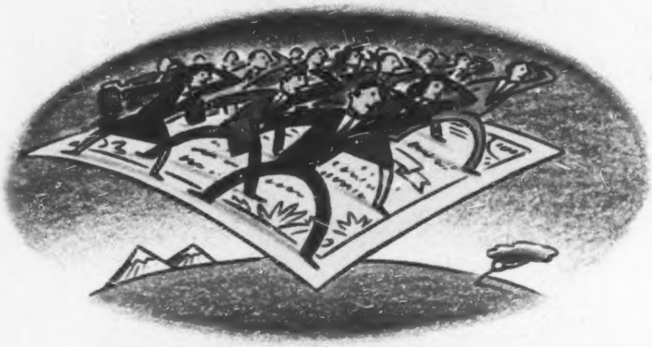
Though there are far less data on how foreign markets behave, those who watch them have discovered some of the same anomalies that offer opportunity at home. "We've found that in the Japanese and British stock markets, small stocks outperform the market just as they do in the U.S.," says Booth of Dimensional Fund Advisors. His firm is already preparing to launch two specialized funds to cash in on the phenomenon in Tokyo and London. Initially the funds will be open only to institutional investors, but if Booth's findings prove correct, it won't be long before a publicly offered mutual fund with similar objectives makes its debut.

In the end, all attempts to beat the market are a search for pockets of inefficiency. Small companies, little followed by Wall Street, constitute a fertile fishing ground for stocks whose prices are depressed by inadequate dissemination of information. Bargains also result from psychological excesses—the market's overreaction to bad news or its irrational disdain for an obscure stock. F

INVESTMENT STRATEGY AND VEHICLES

PUTTING STOCK FUNDS TO WORK

Mutual funds provide built-in diversification and spare you a lot of decision-making. The first rule for the investor is take the long view.



IF YOU HAD picked a stock mutual fund at random a decade ago and stayed with it, you would probably have done better than if you had bought a random sample of individual stocks. In the ten years through last June, stock funds in the U.S. returned an average of 15.2% a year, vs. 12.7% for the S&P 500. Over the past five years, though, stock funds have not quite kept up with the S&P 500, and in the past year they distinctly underperformed it. With stock funds, as with individual stocks, it's best to take the long view.

A RANGE OF RETURNS

TYPE OF FUND	ANNUAL RETURN 1980-85
Equity income	**19.0%**
Small company growth	**17.3%**
Capital appreciation	**16.7%**
S&P 500	**16.6%**
Growth and income	**16.5%**
Growth	**15.7%**
International	**10.3%**

SOURCE: LIPPER ANALYTICAL SERVICES

These Lipper terms for various categories of stock funds are widely accepted in the industry. Equity income funds differ from the others in that they can invest up to 40% of their portfolios in bonds.

According to Lipper Analytical Services, a firm that tracks the performance of mutual funds, the 479 stock funds in the U.S. have assets of almost $90 billion. They have flourished because they offer a lot of diversity for a modest initial investment—typically $500 or $1,000—and do the job of picking and monitoring stocks for you.

The different kinds of funds can help meet different investment objectives. Aggressive investors can buy shares of what Lipper labels **capital appreciation funds** or **small company growth funds.** Both strive for maximum price gains. **Growth funds** invest in stocks of established but still expanding companies. **Growth and income funds** scour the market for stocks of growing companies that pay decent dividends. Less venturesome investors can opt for **equity income funds**, which hold both stocks and bonds and try to achieve high dividend and interest income. **International funds** buy securities traded on stock exchanges outside the U.S. Investors who want to cast their lot with particular sectors of business can choose funds that specialize, for instance, in health, natural resources, or gold stocks.

Stock funds vary considerably in size—anywhere from $100,000 to nearly $4 billion. Smaller funds tend to be riskier than larger funds because they hold proportionately more stock in smaller companies. The larger funds' greater diversity makes them less vulnerable to the market's ups and downs. But some experts think the returns from smaller funds more than make up for the extra risk. A study of 70 stock funds by Gerald Perritt, editor of the *Mutual Fund Letter* in Chicago, shows that between 1979 and 1984 those with less than $20 million in assets had a median annual return of 25.2%, while those with more than $182 million brought a return of only 13.1%.

Larger funds are less volatile but also tend to be less flexible. As investors keep pouring money into a fund, managers have two choices. They can buy more shares of stocks the fund already owns—but the more stock of any one company a fund holds, the more costly it is to get out of the stock quickly, because selling puts downward pressure on the price. The alternative is to invest in new stocks—but it may be hard for a big fund that holds stocks in scores or even hundreds of companies to find new stocks with as much promise as those it owns already.

FUND MANAGERS call this bind "overgrowth." One mutual fund star who faces this problem is Peter Lynch, portfolio manager of the enormously successful $3-billion Fidelity Magellan Fund. "We've had an 11-fold return over the past eight years," Lynch says, "but there's no way we can repeat this performance in the next eight years." Overgrowth has recently led such highly successful funds as Lindner, Windsor, Explorer, and Pennsylvania Mutual to stop accepting new accounts.

When selecting a fund, it's important not to go by recent performance alone. Anyone who bought into international or small company growth funds at the end of 1983 on the basis of their stellar returns that year got burned in 1984. You should also look at longer-term performance. Among the funds that still take new accounts, the best performers in the past five years, according to Lipper, are: capital appreciation funds, **Quest for Value Fund**, New York City; small company growth, **Sigma Venture Shares**, Wilmington, Delaware; growth, **Fidelity Magellan Fund**, Boston; growth and income, **Washington Mutual Investors Fund**, Washington, D.C.; equity income, **Fidelity Equity-Income Fund**, Boston; international, **Merrill Lynch Pacific Fund**, New York City.

You can buy shares in stock funds from the sponsors or through brokers or some large commercial banks. Some funds charge an upfront sales commission, as much as 8.5%; no-load funds don't. But all impose a built-in yearly management fee, usually around 0.6% of assets. **—Edward Boyer**

INVESTMENT STRATEGY AND VEHICLES

BUYING BONDS FOR INCOME, NOT SAFETY

Once a haven for the prudent, bonds have come to be nearly as volatile as stocks. They still offer steady income, but shifts in interest rates can mean capital losses—or gains. Inflation is a menace.

■ *by Edward Boyer*

BONDS USED TO be the Gibraltar of securities, something solely for the unadventurous. They offered steady interest income, with little prospect of capital gains but little danger of capital losses—the perfect refuge for the cautious investor. No more. Bond prices rise and fall with the ebb and flow of interest rates, which now can fluctuate more in one day than they once did in a year. As a result, long-term bonds have become nearly as volatile as stocks. The basic reason for investing in bonds remains the same as ever: steady income. With interest rates on a roller coaster, however, the investor should take into account possible capital losses—or gains.

The investor should also remember that inflation can cost bondholders dearly. Most bonds carry a fixed interest rate; as inflation climbs, the real return on a bond can dwindle to zero or even become negative. Double-digit inflation in the 1970s gave bonds a bad name. Many investors found themselves stuck with bond yields that were under water. It wasn't until inflation subsided in the early 1980s that bonds came back into favor. In this recent comeback, bonds have begun to attract numerous investors who are seasoned stockholders but beginners in bonds. A road map of the terrain should be helpful.

You can buy a bond for as little as $1,000, but it takes a good many bonds to achieve a prudent diversity. If you can't afford to invest in individual bonds but still want to get a foot in the market, you can buy shares of bond mutual funds (see the following article). If you go with individual bonds, you

RESEARCH ASSOCIATE *Patricia Sellers*

A WILD RIDE FOR INVESTORS

TYPE OF BOND	BEST RETURN YEAR	WORST RETURN YEAR
Long-term high-grade corporate	+40.3% 1982	−4.0% 1979
Long-term high-grade municipal	+38.2% 1982	−15.6% 1979
Long-term Treasury	+38.1% 1982	−3.3% 1980
Medium-term Treasury	+33.3% 1982	+0.1% 1980
Long-term low-grade corporate	+32.4% 1982	+0.4% 1980
Short-term Treasury	+24.4% 1982	+5.2% 1980

SOURCE: SALOMON BROTHERS

The wide swings in yearly return during the period 1979-84 show the new volatility of bonds. As calculated by Salomon Brothers, the return includes interest income and changes in bond prices; in the case of Treasury bonds and high-grade corporates, the interest is assumed to be reinvested.

have a large menu to choose from. While each type of bond carries its own combination of risks and rewards and serves different investment objectives, all have certain features in common (see box).

Decisions about which bonds to invest in depend in part on the degree of risk you're willing to assume in exchange for the highest available returns. Entries on the bond menu that are least likely to upset your stomach are **U.S. Treasury notes and bonds** and savings bonds, which are backed by the full faith and credit of the federal government. They're as immune to the risk of default as a security can be and are not callable (except for 30-year Treasuries, which are callable only after 25 years). The interest they pay is exempt from state and local income taxes. As the price of these advantages, Treasuries generally yield 0.75 to 1.5 percentage points less than high-grade corporate bonds.

Treasuries are accessible to the smaller investor. You need a minimum of $5,000 to invest in Treasury notes maturing in less than four years, but only $1,000 to buy bonds with longer maturities. If you don't want to pay broker or dealer commissions, you can buy Treasuries free of commission directly from any of the 12 Federal Reserve Banks or one of their 25 branches.

U.S. savings bonds are as safe as Treasuries and come in smaller denominations. Savings bonds fell out of favor during the 1970s, when inflation made their returns minuscule compared with alternative investments, but they've regained some glimmer since the Treasury Department revamped them in 1982. The new variable-rate Series EE bonds, in denominations of $50 to $10,000 with a ten-year maturity, do not pay out interest. Instead, they sell for half their face value and the interest is automatically reinvested, increasing the redemption value. If you hold the bonds for at least five years, they will return a guaranteed minimum of 7.5% or 85% of the average yield of five-year Treasury notes during the life of the bond, whichever is higher. That would now come to about 8.5%. But if you redeem the bonds sooner, the interest rate is substantially lower. If you sell them in one year, for instance, you will have earned a meager 5.5%. The accrued interest is not taxed until you cash in. Savings bonds can be bought without commission charge from banks and thrift institutions.

If you don't mind assuming slightly greater risk of price fluctuation for potentially higher returns, you can buy **zero-coupon Treasury bonds.** These are one of several varieties of zero-coupon bonds, which have become popular since they were first offered four years ago. Zeros function as automatic compounding machines. They pay out no interest and are sold at a fraction of what their face value will be at maturity. Accordingly, they allow you to lock into a future return that is wholly predictable, which makes them a good vehicle for investors who want to finance, say, their children's college education. Wholly predictable, that is, assuming the issuer doesn't default. In that case, since the entire proceeds of a zero are tied up until maturity, you may have nothing at all to show for your investment. "When you buy zeros, you're putting all your eggs in one basket, so you don't want the basket to have any holes in it," says Peter Hoey, a senior vice president of Financial Security Assurance, a firm that insures corporate debt. Unlike corporate or municipal zeros, Treasury zeros cushion you from that risk.

But Treasury zeros do share some drawbacks with other zero-coupon bonds. Their prices are far more volatile than those of ordinary bonds because so much of a zero's value derives from interest compounded over time. When interest rates drop, the zero's guarantee of continued reinvestment at a higher rate makes it more valuable than other bonds, so the market price rises more

A PRIMER: THE AAAs AND BBBs OF BONDS

■ Unlike a share of stock, which makes the investor part owner of an enterprise, a bond is a loan contract between the issuer (the borrower) and the bondholder (the lender). The contract provides for payment of interest, usually in semiannual installments, at a fixed rate (called the coupon rate) on specified dates. Moreover, the issuer is obliged to return the principal (the face amount of the bond) at maturity. The life of a bond can be as brief as one year or as long as 40 years. Bonds that mature in ten years or less are often called notes. Most bonds are negotiable: before they come due, you can sell them in a secondary market—on an exchange or over the counter.

The measures of bond performance are yield and return. Yield is simply the fixed annual interest payment divided by the bond's price—its market value—at the time. Return takes into account not only interest income but also any gain or loss in the market value of the bond. A bond's price and its yield always move in opposite directions. The coupon rate is fixed. Interest rates in the market fluctuate, however, so the prices of old bonds have to adjust to make their yields competitive with those of newer issues. Accordingly, when interest rates rise, the market value of the bond declines. Conversely, when rates fall, the bond is worth more.

Although you can expect to get the face value back if you hold a bond until maturity, bonds do carry certain risks. One is the "credit risk" that the issuer will default—fail to pay the interest or principal. The other is the "market risk" that a rise in interest rates will clobber bond prices and inflict capital losses.

Longer-term bonds are much more sensitive than shorter-term bonds to fluctuations in interest rates. That's because a bondholder, locked into a fixed rate, misses the opportunity to do better elsewhere if rates rise. The longer the bond's maturity, the greater the potential loss and the resulting decline in the value of the bond. This is why coupon rates on longer-term bonds are normally higher than on shorter-term bonds.

Another drawback common to most bonds is that they are "callable": you can be required to sell them back to the issuer before maturity. That can be painful if you are holding bonds with coupon rates well above prevailing rates for new bonds. Issuers call bonds either to reduce debt or to refinance some of it at lower rates. To give themselves that leeway, issuers often include a call provision in bond contracts. The call price—the amount the issuer is required to pay—is generally set either at face value or at a premium above it. Be wary of buying a callable bond at a substantial premium above the call price.

You can buy bonds through most brokers and bond dealers. They won't charge you for buying a newly issued bond, but they collect a handling fee for buying a bond issued earlier or for selling one before maturity. The fee can be charged explicitly as a commission or built into the price. Fees are set at the discretion of brokers and dealers. They range from about $2.50 to $30 a bond, depending in part on how many bonds you buy and whether you're a regular customer.

steeply. When interest rates rise, however, zero prices fall more steeply than prices of other bonds. If you don't hold zeros until maturity and you guess wrong on interest rates, you may take a bath. The other drawback is that you have to pay taxes each year on the accrued interest even though you don't have it yet. This provision makes zeros most suitable for Keoghs, IRAs, and other tax-deferred savings plans.

Bonds issued by corporations are riskier than U.S. government bonds, but the yields are higher. While **corporate bonds** don't hold out as much chance as stocks for long-term capital appreciation, they generally offer higher current income as well as greater security. In bankruptcy or liquidation, the bondholder has a claim on the company's assets ahead of any stockholder.

Corporate bonds vary in quality, of course. Standard & Poor's and Moody's Investors Service rate bonds by assigning them grades that go from AAA (Moody's equivalent is Aaa) to AA, A, BBB, BB, and so on down to D, the worst. While few corporations have ever defaulted on principal, some have been forced to delay interest payments. For example, Global Marine, a large offshore drilling company in Houston, suspended interest payments last summer on four bond issues rated B−. You can protect yourself against this risk by sticking with high-grade corporate bonds.

To lessen the risk from rising interest rates, you can buy either **floating-rate bonds** or **put bonds**. Interest payments on floating-rate bonds are regularly adjusted to prevailing interest rate levels. Put bonds can be sold back to the issuer at face value at specified times before maturity. Because floating-rate and put bonds are hybrid securities that share some of the advantages of short-term securities, their yields tend to be below those of fixed-rate bonds.

Another kind of hybrid is **convertible bonds**, which offer the high interest income of bonds along with some of the capital gains potential of stocks. Convertible bonds can be exchanged for a preset number of shares of the issuing company's stock at any time during the life of the bond. The value of those shares—the conversion value—is less than the face value of the bond at the time it is issued. If the price of the stock rises enough, the conversion value of the bond can exceed the face value. Ideally you'd want a convertible with a modest gap between price and conversion value as well as a high fixed-income yield relative to the yield you'd get if you owned the stock outright. Despite their merits, convertibles are often overlooked. Explains a top fixed-income analyst: "Many brokers aren't too familiar with convertibles, and they can generally earn higher commissions selling the underlying stock."

If you're venturesome in quest of plump yields and hefty capital gains, you can invest in **low-grade corporate bonds**, known euphemistically as high-yielding bonds—and uneuphemistically as junk bonds. Any bond rated BB+ or lower by S&P belongs in this category. Because the risk of default is greater, low-grade corporate bonds sell at substantially higher yields than high-grade bonds. Over the past ten years defaults per year have averaged 1.52% of the total dollar amount of low-grade bonds outstanding, compared with a 0.08% default rate for all corporate bonds.

If you're venturesome you can invest in bonds euphemistically known as high-yielding—and uneuphemistically as junk bonds.

"Low-grade bonds are not for the novice," says Richard Wilson, a Merrill Lynch vice president. But their defenders claim that the yields more than compensate for the greater risk of default. This view gets support from a recent study by Marshall Blume and Donald Keim at the University of Pennsylvania's Wharton School. Between January 1980 and June 1984, Blume and Keim report, low-grade bonds generated an average annual return—including losses from default—of 13.4%, vs. 7.1% for AAA bonds. Lately the average yield spread between high-grade bonds and low-grade bonds has been about three percentage points, which some analysts consider attractive. Martin Fridson, vice president and manager of credit research at Morgan Stanley, advises wariness toward low-grade bonds if the yield spread falls below 1.5 points.

The 30% tax bracket is the point at which you should start considering **municipal bonds** for maximum after-tax interest income. These securities are issued by state and local governments or governmental entities, and the interest they pay is exempt from federal income tax. If you buy municipals issued in the state where you pay taxes, the interest will probably be exempt from state and local taxes as well. Municipal bonds usually sell in $5,000 units. They come in two varieties: **general obligation bonds**, which are backed by the financial power of the issuer, including its ability to levy taxes, and **revenue bonds**, which are backed only by the income expected from the project they are designed to finance—a sewer system, say. Defaults on municipals over the years have amounted to less than 1% of the face value of all municipal bonds.

If even that default rate worries you, you can buy **insured municipal bonds**. You don't pay for the insurance directly. Instead, the issuer pays the premium and recaptures the cost by offering the investor an interest rate that is usually one-tenth to one-third of a percentage point lower than it would be on an uninsured bond. Insured bonds, which might otherwise rate as low as BBB, get AAA ratings from S&P.

Because they're tax exempt, municipal bonds yield less than taxable bonds, of course. In the late 1970s municipals yielded between one-fourth and one-third less than U.S. Treasury bonds and lagged even further behind high-grade corporates. Lately, though, municipals have yielded about 85% as much as taxable U.S. Treasury bonds of the same maturity. With 20-year municipals now yielding about 9%, an investor in the 50% tax bracket would have to get 18% from a taxable bond to wind up with the same after-tax yield. ■

INVESTMENT
STRATEGY
AND
VEHICLES

A SHORT GUIDE TO BOND FUNDS

Buying a portfolio of bonds is expensive. Bond mutual funds give you diversity for less money, and the different types have different uses.

FOR an outlay of $1,000—sometimes for as little as $100—you can buy shares in a bond mutual fund and get the kind of diversification that takes substantial amounts of cash if you purchase bonds directly. Bond funds, which invest in bonds of numerous issuers and various maturities, have grown robustly in the past ten years. According to A. Michael Lipper, president of Lipper Analytical Services, a well-known tracker of mutual funds, the field has expanded from 79 funds with assets of $7 billion in 1976 to about 400 funds holding more than $80 billion.

A BEVY OF BOND FUNDS

TYPE OF FUND	ANNUAL RETURN 1980-85
Convertible	18.2%
High current yield	13.2%
High-grade corporate	12.4%
U.S. government	11.2%
GNMA	10.8%
Municipal	8.5%

SOURCE: LIPPER ANALYTICAL SERVICES

Convertible funds include convertible preferred stock as well as convertible bonds. GNMA funds are those that invest in securities issued by the Government National Mortgage Association (Ginnie Mae).

Bond funds offer advantages besides low-cost diversification. Fund managers relieve you of the need to monitor individual bond issues for credit and interest rate risks. Moreover, the fund will automatically reinvest your interest payments if you wish.

An investor has several kinds of bond funds to choose from. They include **U.S. government funds**, which hold bonds issued by the Treasury and various government agencies; **GNMA funds**, which hold mostly Government National Mortgage Association securities (Ginnie Maes); **high-grade corporate funds**, in bonds rated A or higher by Standard & Poor's or Moody's Investors Service; **high current yield funds**, primarily in corporate bonds rated BBB or lower; and **municipal bond funds**, which invest in tax-exempt bonds. Investors who want both belt and suspenders, and don't mind giving up about a third of a percentage point of yield, can turn to **insured municipal bond funds**. But that's probably more safety than you need. Says Richard Franke, president of John Nuveen & Co., a Chicago investment bank that specializes in municipals: "They're a terrific marketing idea, but if the portfolio manager is doing what he's supposed to do, you shouldn't need insurance."

The best source of information on the long-term performance of bond funds is the annual directory sold by Wiesenberger Investment Cos. Service of New York. It costs $295 but is available at some public libraries. Bond fund performance hinges on the fund manager's reading of interest rate trends and his investment strategy. At the end of June the average U.S. government fund had 28% of its assets in bonds with 21- to 30-year maturities, which tend to be higher yielding but more volatile than bonds with shorter maturities. But that average conceals considerable diversity. Federated Income Trust in Pittsburgh had 89% of its assets in 21- to 30-year bonds; John Hancock's U.S. Government Securities Fund was entirely invested in maturities of ten years or less. Says David Turner, John Hancock's portfolio manager: "The chief objective of the fund is security of principal, so we don't want too much volatility."

Like other mutual funds, bond funds are either load or no-load. Both kinds impose a built-in annual management fee—usually 0.4% to 1.5% of average assets. Load funds, sold by brokers as well as the fund sponsors, also charge a sales commission of 1% to 8.5% up front. No-load funds, which are usually sold directly by the sponsor, don't charge up-front commissions, but many make up for it at least in part by imposing other charges. "There can be a lot of hidden fees in no-load funds," says Lipper. Some charge a redemption or exit fee that may run as high as 6% in the first year. Others take out as much as 1.25% of the fund's average assets each year. Named for the Securities and Exchange Commission rule that allows them, these 12b-1 funds seldom spell out their actual fees in their prospectuses.

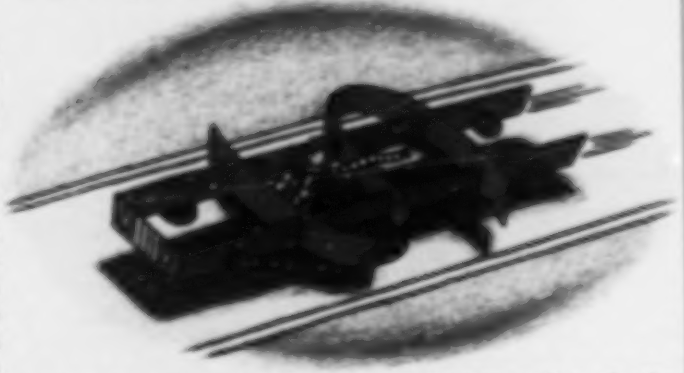
ACCORDING TO LIPPER, the following bond funds paid the best returns over the past five years: U.S. government funds, **Fidelity Government Securities Fund**, Boston; GNMA, **Vanguard Fixed-Income Securities Fund—GNMA Portfolio**, Valley Forge, Pennsylvania; high-grade corporate, **Putnam Income Fund**, Boston; high current yield, **Kemper High Yield Fund**, Chicago; municipal, **MFS Managed Municipal Bond Trust**, Boston.

If you want a steady stream of income and intend to hold your shares for a period of years, you can invest in bond unit trusts. Unlike mutual funds, unit trusts are not actively managed. Trust sponsors buy mostly long-term bonds and hold them until maturity unless they foresee a default. Even when they cash in their bonds, they don't add new ones. Accordingly, unit trusts are not generally affected by fluctuations in interest rates. Unit trusts are sold through brokers or directly by the sponsors. Most trusts require a minimum investment of $1,000 and carry a 4% to 5% sales charge up front. **—Edward Boyer**

INVESTMENT STRATEGY AND VEHICLES

OPTIONS AND OTHER EXOTICA

Specialized investment products now let you play a host of new games—among them placing a leveraged bet on the whole stock market.



ONCE upon a time brokers had just three things to do: sell stocks, sell bonds, and send Christmas cards. Nowadays they also peddle a plethora of new investment vehicles devised to help their customers cope with the inflation and volatile financial markets of the past dozen years. The new products give the amateur player access to markets and strategies that were once the private domain of big institutions. Some of the new vehicles are decidedly not for everyone; they demand a pro's expertise and entail risks that could quickly send your nest egg the way of Humpty Dumpty. Here are some new and nontraditional investment vehicles that seem free of unusual hazards and offer the individual potentially attractive winnings:

▶ **STOCK-INDEX OPTIONS.** Suppose you have neither the time to try beating the market by following individual companies and buying their shares, nor the money to buy the safety that a large and diversified portfolio affords. Yet you are impatient to increase your wealth with a leveraged investment. The answer may be the hottest of the new vehicles: options on a whole basket of stocks in an industry—a group of computer manufacturers or oil companies, for example—or the entire stock market. Broad stock-index options let investors bet on moves in Standard & Poor's 500-stock index, the Dow Jones industrials, or even the volatile index of Nasdaq over-the-counter stocks.

Options to buy or sell individual stocks have been available since 1973. An option gives its owner the right, but not the obligation, to buy or sell securities for a specified price before a specified future date. Options also provide plenty of bang for the buck. If, for example, an investor is bullish on the short-term prospects for IBM, it would cost more than $12,500, based on a recent price of $125, to buy 100 shares of Big Blue. Even buying the stock on margin would require an outlay of at least $6,250 before commissions. But you can buy a "January 130" call option on IBM, recently trading at only $281. The option gives you the right to buy 100 shares of IBM at $130 anytime through January 19, when the option expires. No matter how high IBM stock goes, the option holder is guaranteed a price of $130, and therein lies the potential for profit. Conversely, if you think IBM stock is poised to decline, you could buy a January 120 put option, which gives you the right to sell 100 shares of IBM stock at $120. If the stock price drops below $120 a share, you pocket the difference.

Stock-index options work in much the same way, with one exception. It's impractical for an option holder to exercise his right to buy or sell a whole basket of securities, and few players are interested in ownership anyway. So any profit or loss is settled in cash. As with individual stock options, there's a limit to losses: if you bet wrong, you're out the price of the option and no more. That's not true of stock-index *futures*, which the inexperienced should avoid like a bramble patch. You can make a bigger killing with a futures contract than with stock-index options if the market goes your way. If it doesn't, you can lose many times your stake.

The most popular stock-index option is the S&P 100, based on an index composed of 100 blue-chip stocks—among them such household names as AT&T, Exxon, General Electric, and IBM. An investor can buy, say, a two-month call on a portfolio recently worth $18,000 for only $300. If the market rises, he reaps almost the same profit as another investor who committed many times as much to owning the whole portfolio. Though the S&P 100 index represents a limited group of stocks, it's a convenient way to bet on the moves of the overall stock market, since it closely follows each jiggle of the S&P 500 index.

Many investors use the new index options not to place bets but to lay off some of the risks of owning stocks. This practice, known as hedging, can cut your losses if the stock market declines. For example, an investor who owns a diversified portfolio of stocks can buy an S&P 100 put option whose value would soar as that of the portfolio sank. Yet if the stock market rallied sharply, the investor would lose only the price of the put while rejoicing in the portfolio's ascent.

As a rule, a nonprofessional investor should be only a buyer, and not a seller, of options. Selling, or "writing," them can be perilous. A relatively safe exception is to sell so-called covered calls on securities you hold. If, for example, you own IBM and expect the price to remain fairly steady in coming months, you can sell a six-month call option. If IBM doesn't go up during that period, you'll be richer by the amount you got for the option. If it takes off, however, you'll miss the party because the gains will belong to the option holder. In effect, you will have traded potential future gains for cash now.

▶ **INTEREST RATE OPTIONS.** For investors interested in the bond market but disinclined to own big portfolios, there's a leveraged way to bet on where interest rates are headed. Options representing $100,000 worth of securities are available on U.S. Treasury bonds and Treasury notes. Like stock-index options, interest rate options can be used not only to speculate but also to hedge a portfolio—in this case against an adverse move in rates. Few individuals hold enough bonds to take advantage of hedging, but they can buy into bond mutual funds that do.

More than a dozen bond funds, with assets totaling more than $20 billion, have begun using interest rate options as a way to raise current income. The fund managers

RESEARCH ASSOCIATE *Brett Duval Fromson*

INVESTMENT STRATEGY AND VEHICLES

do this by selling call options against their portfolios. In the past year, as bond prices generally rose, they have therefore missed out on some capital gains. But when bond prices lag, this ploy can put a fund out ahead.

▶ **ECU BONDS.** You're convinced the dollar is headed downward and you hanker to speculate in foreign currencies. Options are available only on individual currencies, however, and you don't want to buy a lot of different ones. A simpler approach is to buy ECU bonds, which first appeared in the U.S. market a year ago. The bonds are denominated in European Currency Units, a basket of ten currencies in which each currency is weighted by the size of the country's economy and its relative share of the ten countries' trade. The West German deutsche mark has the most heft, the Luxembourg franc the least. The European Economic Community floated the first ECU bond issue in the U.S., and four more have followed—one from Hercules, an American chemical producer.

The interest rates on ECU-denominated bonds are generally lower than on dollar bonds. The European Economic Community's bond, for example, yields about 1½ percentage points less than U.S. Treasury bonds of the same maturity. That's a lot of yield to give up just to get foreign currency exposure, but so far it's been a price worth paying. The drop in the dollar through September has helped send the EEC bond 32.3% higher so far in 1985.

▶ **AMERICAN DEPOSITARY RECEIPTS (ADRs).** Investor interest in foreign stocks has never been higher, but only 100 or so, mostly Canadian, are listed on American exchanges. Buying stocks listed on foreign exchanges can be expensive; unless your broker has a seat on one of them, which few U.S. brokers do, he will have to buy through an overseas firm and the commissions may be steep. Owners of overseas stocks also face the complications of foreign tax laws and the nuisance of converting dividend payments into dollars. It may also be difficult to keep track of your stocks' performance, since American newspapers carry only a limited number of quotes from foreign bourses.

There is a simpler way. A growing number of investors are buying American Depositary Receipts of non-U.S. companies. ADRs are receipts for foreign shares held in trust by a bank––usually a foreign branch or a local correspondent of an American bank—and they are increasing rapidly. Dean Egly, who runs the ADR operation at Morgan Guaranty Trust, says the number of ADRs trading in the U.S. has more than doubled since 1980, to 1.5 billion. Some of the receipts are for more than one share of stock. Each ADR of Honda Motor, whose stock doesn't trade in the U.S., represents ownership of ten shares of Honda stock, which is traded on the Tokyo exchange. Commissions on ADRs are the same as on regular stock purchases, and a growing number of ADRs are quoted in newspapers daily. Moreover, for a small fee five New York banks handle all the paperwork and remit dividends converted into U.S. dollars.

▶ **DUAL-PURPOSE INVESTMENTS.** Stocks offer both dividend income and capital gains. But with Americus trusts, you can

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take your pick and get more of what you want. Americus Trust Shareowner Service Corp., a New York firm that sponsors the trusts, has split some Exxon stock and some old, predivestiture AT&T shares into a Prime part and a Score part. The Prime part entitles its holders to all dividend income from the stock and a small participation in any future price appreciation. The Score part, akin to a long-term warrant on the stock, entitles its holder to all price appreciation beyond the small amount allocated to the Prime holder. Prime and Score trade separately.

Investors who want to buy into a bigger portfolio of split stocks can buy shares in two closed-end mutual funds recently offered by Merrill Lynch. Investors in both funds, Gemini II and ML Convertible Securities, can buy either income or capital-appreciation shares.

Joseph Debe, Americus's president, says his firm is going to split the stocks of 29 more big-name companies, including General Electric and IBM. Registration statements to create the trusts are now on file with the Securities and Exchange Commission. Investors who already own these stocks may want to consider swapping them for their Prime and Score components. Those who want more dividend income can then sell off the Score part and plow the proceeds into more Prime components. Investors more interested in capital gains can do the opposite.

▶ **MASTER LIMITED PARTNERSHIPS.** You like the high yields and tax breaks offered by limited partnerships, such as those widely sold in oil and real estate ventures. But there's no secondary market where you can quickly convert your interest to cash, and you don't want to tie your money up for years. The growing list of "master" limited partnerships, mostly in oil drilling and income funds, are designed to solve your problem. They first appeared in 1981, when Apache Petroleum, an oil exploration company, allowed investors in its many limited partnerships to consolidate their interests into one grand, or master, partnership. The units are listed on the New York Stock Exchange, and you can buy and sell them through your broker. Twenty-two more master partnerships have since appeared and more are being formed every day, as oil companies spin off some of their properties. Says Fuhrman Nettles, a vice president at Robert A. Stanger & Co., a New Jersey-based research firm specializing in tax shelters: "The movement toward master limited partnerships is growing like gangbusters."

Investors who buy the units get a direct interest in a diversified group of oil properties and income payments that can in some cases be munificent. The Damson Energy Co. master partnership B, traded on the American Stock Exchange, has been one of the biggest gushers, with a recent yield of 18%. What's more, the yield is regarded by the IRS as a return on capital, not as ordinary income, and it's taxed at low capital gains rates when the units are sold. Damson B's high yield results from the fact that it is paying out 100% of its income after expenses. Others pay less: the Belden & Blake Energy Co. master partnership yields only 16%, but it's plowing about 25% of its income back into exploration. Investors may get lower yields from this arrangement, but they have the prospect of much bigger gains down the road should the drillers find oil.— **John J. Curran**

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INVESTMENT STRATEGY AND VEHICLES

WHERE TO PARK YOUR CASH

Yields, access, minimum investment, taxes—the fine print is the key to sorting out short-term instruments like CDs and money funds.

EVERY now and then you may find yourself with some cash that you'd like to park for a while. Perhaps you've sold some stocks and haven't yet decided how to invest the money for the longer run. Four kinds of short-term fixed-income instruments make good parking places: money market mutual funds, money market deposit accounts, short-term certificates of deposit, and Treasury bills. All pay much better yields than a passbook savings account and still offer protection against serious capital losses.

These instruments for parking cash differ in degree of liquidity (ready access to your money). The most liquid are the money market deposit accounts—MMDAs for short—offered by banks and thrift institutions. MMDA holders can make any number of withdrawals from their accounts but are not allowed to write more than three checks a month to third parties. According to a breakout of investor data done for FORTUNE by Market Facts Inc., a financial market research firm in Chicago, MMDAs account for 12.2% of all liquid assets and 4.9% of total financial assets held by U.S. households—impressive figures, considering that the accounts have only been around since December 1982. They're safe: the federal government insures both principal and interest, up to $100,000 per person at one institution. "No one has ever lost a penny on a federally insured account in MMDAs," says Robert K. Heady, publisher of *Bank Rate Monitor*, based in North Palm Beach, Florida. The *Monitor* and another Heady publication, *100 Highest Yields*, are weekly newsletters that track developments in the MMDA and short-term CD markets.

MMDAs aren't all alike. For one thing, institutions that offer them differ in minimum-deposit requirements. Most penalize you if you let your balance fall below the minimum—usually $1,000. Moreover, yields vary from city to city and even from one institution to another within the same city. Institutions differ not only in the rates they pay but also in the way they compound and credit interest. According to Robert Heady, the institutions that offered the highest yields on MMDAs in the first half of 1985 were **First Federal Savings Bank** in New Orleans, **Meridian Savings Association** in Arlington, Texas, and **Western Savings Association** in Houston. To open an account in an out-of-town bank or thrift, all you have to do is call the institution's officer in charge of national consumer money market accounts.

Money market mutual funds, also highly liquid, became popular in the early 1970s as rising interest rates began to make traditional passbook savings accounts look unattractive. Most brokers and mutual fund organizations offer a fund of this kind and will transfer money to it from equity or bond funds at no charge. Money market funds now account for 4.6% of liquid assets and 1.9% of total financial assets held by U.S. households.

The funds come in several varieties. The most popular is the general purpose money fund, which invests in a wide range of short-term securities such as T-bills, certificates of deposit, and commercial paper (short-term corporate IOUs). Other funds invest in a single type of instrument, such as U.S. government securities or tax-exempt bonds of state and local governments. Money funds are not federally insured, but their safety record is impressive. In 1983 the money market fund industry lost 25% of its deposits as many investors moved their cash into the more lucrative stock market, yet the funds were able to process redemptions quickly and avert serious trouble.

Most funds call for only a modest minimum investment, often as little as $1,000, and some set no minimum at all. You can write as many checks as you wish against the account. Generally the checks must be in amounts of $500 or more. Money funds are no-load, meaning that the only standard cost is a built-in annual fee—ranging from a quarter of a percent to 2% of the fund's assets—that the sponsor deducts to cover management service and operating costs.

Yields vary from fund to fund. Since the interest that a fund earns on its securities changes only as they mature and are replaced by other securities, money fund yields tend to lag behind fluctuations in interest rates. The extent of the lag—typically four to six weeks—depends on the portfolio's average maturity. In general, funds with a short average maturity do better when interest rates are rising because they can take advantage of the rise quickly; those with a long average maturity do better when rates are falling because their return remains high longer.

LARGER FUNDS generally pay higher yields than smaller funds. The larger the fund, the less risk it runs to the portfolio by mixing some higher-yielding securities that have longer maturities with safer, lower-yielding securities that mature sooner. According to William E. Donoghue, president of the Donoghue Organization in Holliston, Massachusetts, and publisher of the authoritative *Donoghue's Money Fund Report*, the general purpose money funds that paid the best returns over the past three years were **Kemper Money Market Fund**, Chicago; **Prudential-Bache Money Mart Assets**, New York City; **E.F. Hutton Cash Reserve Management**, New York City; **Vanguard Money Market Trust—Prime Portfolio**, Valley Forge, Pennsylvania; and **T. Rowe Price Prime Reserve Fund**, Baltimore.

Investors who want greater safety at slightly lower yields can opt for a fund that holds only U.S. government securities. As a rule, funds that invest solely in Treasury bills yield about one-quarter of a percentage point less than general purpose money funds, but some funds do better than those that invest only in T-bills by buying the securities of

RESEARCH ASSOCIATE *Patricia Sellers*

such federal agencies as the Federal Home Loan Bank Board. The U.S. government money funds that have performed best over the past three years are **Cardinal Government Securities Trust**, Columbus, Ohio; **Vanguard Money Market Trust—Federal Portfolio**, Valley Forge; **Calvert Group First Variable Rate Fund**, Washington; **Merrill Lynch Government Fund**, Boston; and **Shearson Government and Agencies**, New York City.

Like the interest on MMDAs, dividends on money fund shares are generally taxed as ordinary income by federal and state authorities. Accordingly, investors in high tax brackets are often better off putting their cash in a tax-exempt money fund. On an annual basis, the average yield of tax-exempt money funds in the first half of 1985 was 5.2%, which for an investor in the 50% tax bracket would have been equivalent to 10.4% from a taxable fund. That compared favorably with the average yield of 8% on general purpose funds and 7.7% on U.S. government funds. The best performers among tax-exempt funds over the past three years: **Lexington Tax Free Money Fund**, Saddle Brook, New Jersey; **Calvert Tax-Free Reserves—Money Market Portfolio**, Washington; **Vanguard Municipal Bond Fund—Money Market Portfolio**, Valley Forge; **T. Rowe Price Tax-Exempt Money Fund**, Baltimore; and **E.F. Hutton Municipal Cash Reserve Management**, New York City.

Most tax-exempt funds are exempt only from federal income taxes, not from state and local taxes. If you live in a high-tax state such as California, Massachusetts, or New York, you should consider the specialized money funds that invest in tax-exempt securities issued by a particular state or by government authorities within that state. The dividends of such funds are exempt from federal, state, and local income taxes.

IF YOU'RE WILLING to forgo some liquidity, you can generally get a better pretax return than money funds offer by acting as your own fund manager, buying short-term CDs or T-bills and holding them until they mature. CDs, the nation's most popular short-term investment, account for 24% of the liquid assets and 9.6% of total financial assets held by U.S. households. Short-term CDs come in standard maturities of three, six, nine, and 12 months. As with MMDAs, the federal government insures CDs, both principal and interest, up to $100,000 per person. Normally banks and thrifts charge no commissions or fees when you buy or cash in a CD at maturity—but they levy a substantial penalty if you withdraw your money before maturity. Legally the minimum early withdrawal penalty on a CD that matures in one year or less is 30 days' interest. But some institutions charge more. Chemical Bank in New York City, for example, charges three months' interest for early withdrawal of a six-month CD and six months' interest on a one-year CD. Since CD advertisements do not spell out early withdrawal penalties, you have to ask your account officer.

To avoid those penalties, you may want to buy your CD from a major brokerage firm like Merrill Lynch. Since the large brokers scour the country for high-yielding CDs and create a secondary market in them, they sometimes offer better returns than banks or thrifts and also let you cash in your CD before maturity without penalty. Deposit-insurance authorities in Washington are trying to do away with federal insurance on these so-called brokered deposits, but they seem unlikely to succeed. So at least for the time being, most brokered CDs are just as safe as bank and thrift CDs.

Yield information is often hard to decipher. For example, ads for CDs that mature in less than one year quote an annual yield that assumes the investor will reinvest his principal and interest. This is misleading, not only because the investor may not want to roll over his CD, but also because yields are based on current rates and the institution is unlikely to offer the same rate at rollover as it did on the original CD. So be sure to ask how much your account will earn through maturity. Also find out whether the institution allows "add-ons." Some banks and thrifts will let you put more money into your CD weeks or even months after you purchased it, at the same rate of interest as the original amount. The interest CDs earn is taxable as ordinary income. Early withdrawal penalties, however, are tax deductible.

Investors who are especially concerned about safety can always turn to Treasury bills, available at a nominal fee from banks, some thrifts, and brokers, or less conveniently but free of sales commission from the 12 regional Federal Reserve Banks or one of their 25 branches. T-bills come in maturities of three, six, and 12 months; they're available in a minimum denomination of $10,000 and in multiples of $5,000 above that. Unlike other short-term vehicles, which pay periodic interest, T-bills are sold at a discount from face value and redeemed at full face value when they mature. The interest the T-bill holder gets is the difference between the purchase and redemption prices. Interest earned on T-bills is subject to federal income tax but exempt from state and local taxes.

—Edward Boyer

PARKING PLACES

	YIELD RANGE 9/84–9/85	
	HIGH	**LOW**
SHORT-TERM INVESTMENTS		
General purpose money market funds	**11.08%**	**7.25%**
U.S. government money funds	**10.57%**	**7.09%**
Tax-exempt money funds	**6.22%**	**4.31%**
Money market deposit accounts	**9.78%**	**6.70%**
Six-month certificates of deposit	**11.15%**	**7.45%**
One-year certificates of deposit	**11.50%**	**7.89%**
Three-month Treasury bills	**10.57%**	**7.09%**
Six-month Treasury bills	**10.99%**	**7.26%**
One-year Treasury bills	**11.39%**	**7.66%**

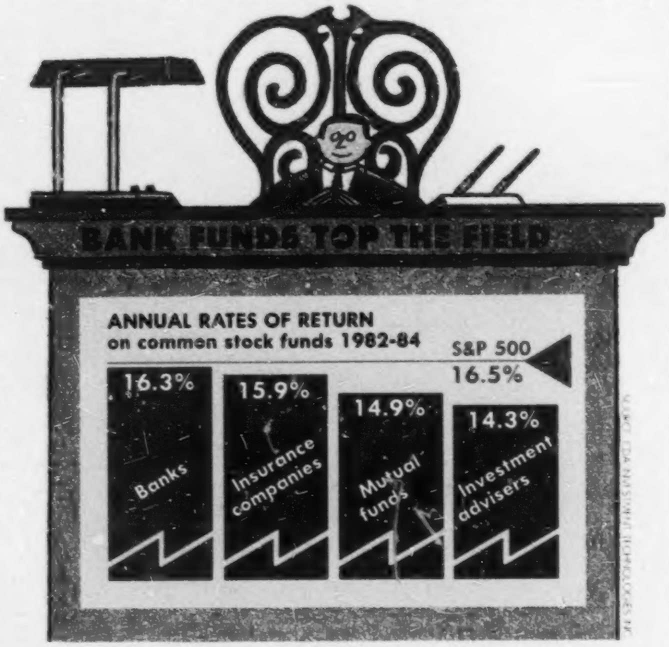
SOURCES: DONOGHUE'S MONEY FUND REPORT, BANK RATE MONITOR, SALOMON BROTHERS

While yields on all these instruments rise and fall with the tides of interest rates, some pay more than others. U.S. Treasury bills require a minimum investment of $10,000, much more than money funds or CDs. As a rule, the longer the maturity of a T-bill or CD, the higher the yield. The wide range between highs and lows reflects the general ebbing of interest rates within the past year.

SOURCES OF HELP

BANKS SHINE AT MANAGING MONEY

Believe it or not, performance-minded investment managers in today's trust departments sometimes put sizzle in the customers' stakes.



SOURCE: CDA INVESTMENT TECHNOLOGIES INC.

Surprise. Measured by return on equity investments, bank trust departments outperformed mutual funds, insurance company funds, and investment advisers from 1982 through 1984, according to a recent study.

WHAT is the fastest way to make a small fortune? In years past many people knew the punch line: "Give a large fortune to a bank trust department." As the joke suggests, some banks did far worse than simply fail to keep pace with the performance of other money managers. They actually lost money for their clients. A 1976 study showed that over the previous five years, four out of 20 major banks achieved negative rates of return on their common stock funds. Disgruntled trust customers often complained and sometimes sued. Horror stories abounded, like the one about a big Texas bank that managed to lose 40% of the assets of a small trust.

Stung by bad publicity and the loss of trust customers to investment advisers and other money managers, banks have reorganized their trust departments to improve investment performance. Some have set up their portfolio managers in separate investment advisory subsidiaries and given them a share of the profits. Banks must have done something right: those weakling bank funds of the 1970s are strong performers today.

A recent study found that bank commingled trust funds outperformed mutual funds, insurance company funds, and even investment advisers over the three years from 1982 through 1984 (see chart). "That bank funds would even be in the running would surprise many people," says Robert A. Levy, president of CDA Investment Technologies, the firm that did the study. It was commissioned by the American Bankers Association, but the findings should not be dismissed for that reason. CDA, based in Silver Spring, Maryland, is a reputable company, and the procedures followed in the study seem sound.

Although a fence of federal rules and regulations stands between banks and individual investors, there are several ways to get some of your money under bank management, if you have enough of it. The most direct route is simply to hire a bank, as you would any other investment adviser, to manage your money. But this route is only for investors with large sockfuls of cash—generally at least $500,000.

A few banks, however, now sell their own commingled trust funds for individual retirement accounts. They include Citibank of New York, Wells Fargo Bank in Los Angeles, and San Francisco's Bank of California. The mutual fund industry's trade association has sued, claiming among other things that sales of the funds violate a federal law against the issuance of securities by banks. A federal district court in Washington has ruled that banks can sell IRA funds, and a federal court in California has ruled that they cannot. The appeals go on.

At least three other banks have poked their noses under the mutual fund industry's tent. These banks serve as investment advisers to funds distributed by conventional mutual fund sponsors. Security Pacific National Bank of Los Angeles, for example, manages the Pacific Horizon Funds, affiliated with Dreyfus Corp. Chase Manhattan is investment manager of the Park Avenue Funds, also sponsored by Dreyfus. First Union National Bank of Charlotte, North Carolina, advises the Salem Funds, sponsored by a subsidiary of Keystone Massachusetts Group.

The only way to get into one of a bank's own common stock funds is to put the money into a trust at the bank. The simplest procedure is to set up a so-called living trust, which allows the individual to control the assets. The trust can be canceled at any time. It can be written to terminate on the person's death, or it can continue to oversee distribution of the assets to heirs, an arrangement that can avoid probate for assets in the trust.

Banks require a minimum investment of $100,000 to $500,000 for their funds, depending on the institution. A bank typically charges a 1% annual fee that covers managing the money and administering the trust. All banks require that the trust be bona fide—that is, have some purpose other than serving as a device to get money into the commingled trust funds. This is to keep the banks out of trouble with the Securities and Exchange Commission, which might otherwise contend that the bank was selling a mutual fund to the public. One acceptable purpose of a trust could simply be to pay bills or manage property for someone who travels a lot, or is going on a long trip. Some banks insist that a lawyer review and sign the trust document. This can add $50 to $750 or more to the price of admission.

A bank with a high-performance stock fund especially needs ways of politely turning off investors who want to get in. "The number of calls we receive from people wanting to deposit money is incredible," says William Jeffery III, president of California First Bank's investment counseling subsidiary. "But we wouldn't take a trust for investment purposes. We just have to turn all that money away." **—Dexter Hutchins**